



**INTERNATIONAL UNION OF  
GEOLOGICAL SCIENCES**

**INTERNATIONAL UNION OF THE  
HISTORY AND  
PHILOSOPHY OF SCIENCES**

**INTERNATIONAL COMMISSION ON THE HISTORY  
OF  
GEOLOGICAL SCIENCES  
INHIGEO**

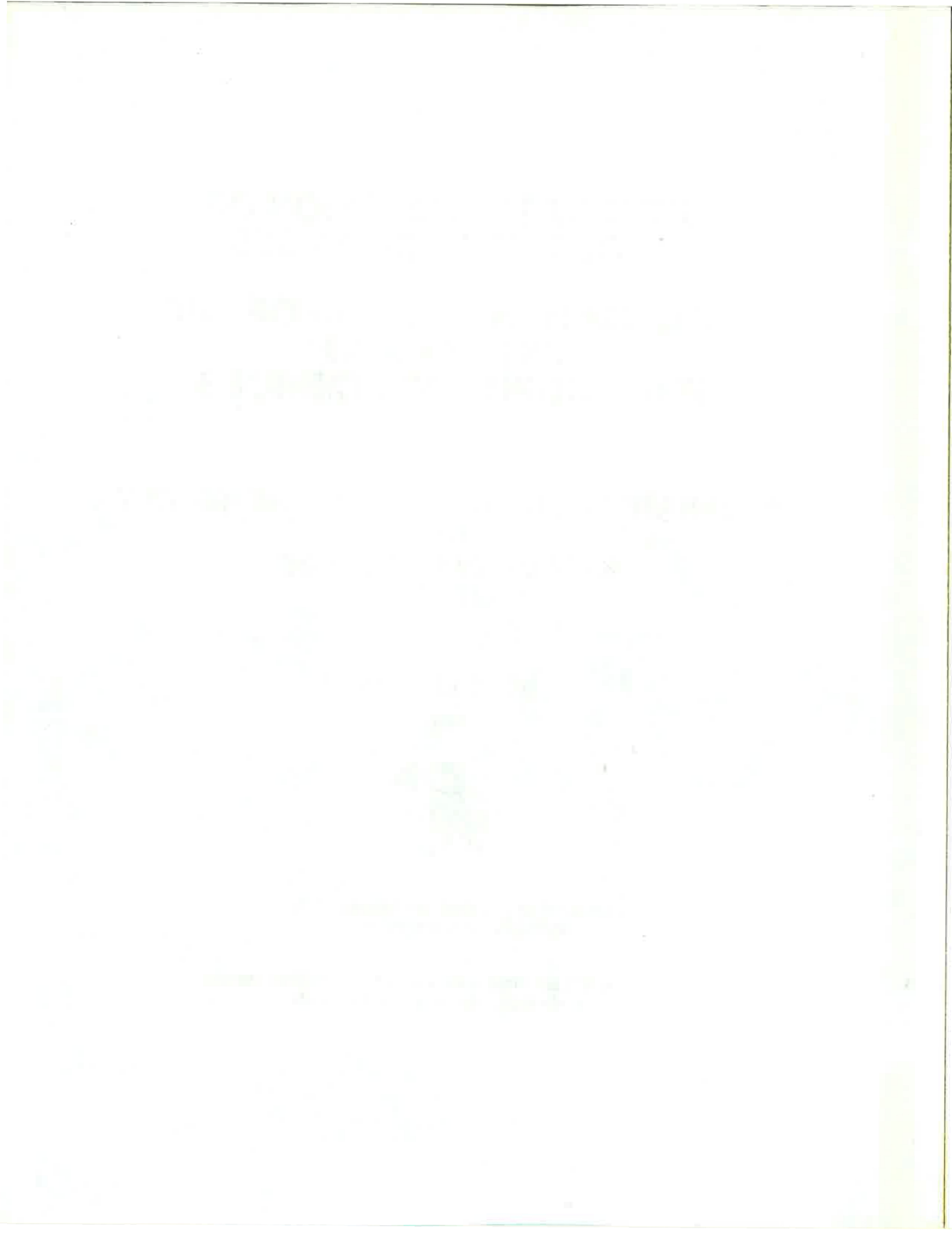
**NEWSLETTER 22**

**1990**



**Compiled and Edited by Ursula B. Marvin  
INHIGEO Secretary-General**

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## PREFACE

The change of INHIGEO officers and editors that took place at the International Geological Congress in Washington in July 1989 has resulted in some delay in the compiling and issuing of this Newsletter. Newsletter No. 21, published in Moscow in 1988, included reports for 1986 and news of certain meetings held in 1987. Most of the country reports in the current issue were submitted before July 1989, to Dr. Endre Dudich, the previous INHIGEO Secretary-General, and are for 1987 and 1988. To these have been added a report on INHIGEO participation in the International Geological Congress of 1989. The majority of 1989 reports, however, will appear in Newsletter No. 23. In order to save space and printing expenses, it has been necessary to abbreviate many of the country reports and to omit most of the individual reports.

Publication and distribution of earlier Newsletters has been carried out at no cost to INHIGEO through the courtesy of the U.S.S.R. Academy of Sciences, the Wilhelm-Pieck University at Rostock, and the Hungarian Geological Survey. This has been an extremely valuable service to INHIGEO, for which we give our sincerest thanks to Professor V. V. Tikhomirov, Professor Martin Guntau, and Dr. Endre Dudich. At this time, however, INHIGEO must begin to pay for printing the Newsletters. Our 1990 budget will cover expenses, but, in the near future, the INHIGEO Board will have to consider new long-range plans for funding the Newsletters and other INHIGEO activities.

This issue includes the INHIGEO membership list as it stood after the business meeting in Washington July 12, 1989. We now have 24 Full Members and 57 Corresponding Members in 27 countries. We welcome all of our new members and hope that they will actively pursue research and generate conferences and symposia on the history of geology. I urge every member to submit items for Newsletter 23 before November 1, 1990. It is customary for Corresponding Members to send news items to the Full Member from their country, and for the Full Member to write a country report and forward it, along with attached individual reports, to the Secretary-General. Some years ago the INHIGEO Board decided to print the Newsletters in English, and so I request that reports be sent to me in English.

*Ursula B. Marvin*  
Secretary-General of INHIGEO  
June 1990

## The INHIGEO Board 1989-1992

### **President**

Professor Martin Guntau  
Wilhelm-Pieck-Universität  
Rostock, G.D.R.

### **Vice President**

Professor V. V. Tikhomirov  
U.S.S.R. Academy of Sciences  
Moscow, U.S.S.R.

### **Secretary-General**

Dr. Ursula B. Marvin  
Harvard-Smithsonian Center  
for Astrophysics  
Cambridge, Mass. U.S.A.

### **Past-President**

Professor Gordon Y. Craig  
University of Edinburgh  
Scotland, U.K.

**BY-LAWS  
OF THE INTERNATIONAL COMMISSION ON THE HISTORY OF GEOLOGICAL SCIENCES**

(as amended at Pisa, Italy, on the 25th of September 1987)

1. **INHIGEO** is a Commission of the International Union of Geological Sciences (IUGS), and it is affiliated with the International Union of the History and Philosophy of Sciences (IUHPS). It is therefore bound by the rules set in the statutes, by-laws and regulations of IUGS for Committees of IUGS (By-laws IUGS VI, 22; cf. Statutes IUGS VII, 24-28).

2. The task of **INHIGEO** is to promote studies in the history of geological sciences and to stimulate and coordinate the activities of national and regional organizations that have the same purpose. It does so *inter alia* by promoting the holding of national, regional and international symposia and the publication of individual and collective works on the history of geological sciences (cf. Statutes VII, 24).

3. Reports on the work performed and an evaluation of the fulfillment of working terms and the accounts are submitted on the 1st of December each year to the Secretary-General of the IUGS (IUGS regulations, III Committees, p. 15). Reports on the work performed in the period between sessions of IUGS and IUHPS are submitted to the sessions of those organizations (Statutes VII, 27). The budget for the following year is submitted by the President and the Secretary-General to the Secretary-General of IUGS before the 1st of October each year.

**Structure**

4a. **INHIGEO** consists of a convenient number of members, kept at a practical minimum in relation to the nature of its work (Statutes VII, 26).

b. Full Members are elected from among scientists active in the field of the history of geological sciences. There should be only one Full Member from any given country.

c. Full Members are elected by the Council of the IUGS, on a proposal voted by the acting Full Members, after nomination by the President and the Secretary-General of IUGS (cf. Statutes VII, 25).

d. The Board of **INHIGEO** consists of the President, the Vice Presidents, the Secretary-General and the Past President. The members of the Board represent the major regions: the Americas, Western Europe, Eastern Europe, Asia, Australia and Oceania, and Africa. They are elected by the Full Members of **INHIGEO** (subject to approval by the Council of the IUGS), from among the Full Members. The President and the other members of the Board remain in office until the next session of the Council of IUGS. The President and the Secretary-General are eligible for reelection to only one additional term: the other members are eligible for reappointment (Statutes IUGS VII, 25).

e. It is recommended that membership of the Board should circulate among regions and countries as much as possible.

f. Corresponding Members are elected by the Full Members of **INHIGEO** from among scientists known by their publications and/or other activities in the field of the history of geological sciences. They are elected until the next session of the IUGS Council, and may be reelected without restriction. The initial nomination for a Corresponding Member must be endorsed by the National Committee of Geology, Geological Society, Academy of Sciences, or other competent scientific body of the country concerned. Corresponding Members should be asked in writing half a year before the expiration of their terms whether they apply for reelection. Failure to apply results in cancellation of the corresponding membership. After July, 1989, the number of Corresponding Members should not exceed ten from the same country.



## Functions

5. The Board directs the activities of **INHIGEO**. The President may delegate his powers to one of the Vice Presidents by mutual agreement. The President and the Secretary-General divide the management of organizational and financial matters between themselves.

6. The Board sends annual information to the Full Members and Corresponding Members by means of a NEWSLETTER in the language of the official text of IUGS Statutes (cf. Statutes VIII, 32), and, if convenient, in one of the other official languages of IUGS (cf. Bylaws IUGS par. 25: French, German, Italian, Russian and Spanish).

7. Regular Meetings of **INHIGEO** are held at the time of the sessions of the International Geological Congress, in order: a. to discuss reports on the work of **INHIGEO** and of national groups (which have been formed either by free association of historians of the geological sciences or by appointment by national Geological Societies or Academies of Science), and to consider plans for next term. b. to make nominations of Full Members for election by the Council of IUGS and to elect (and reelect) Corresponding Members and the Members of the Board for the next term.

8. Business meetings of the Commission, or of its Board, can be convened at any time by decision of the Board. It is recommended that such a meeting be held at least once in two years.

9. In the Business Meetings of **INHIGEO** each Full Member (including the Members of the Board) has a vote. A decision is considered valid if it has been voted affirmatively by a simple majority of the total number of Full Members. In case any one of them is not present at the meeting, he/she has the right to vote by correspondence (on motions circulated by the Secretary-General before the meeting) or by a proxy, who shall be designated in advance in writing. A proxy may be either a Full or a Corresponding Member of **INHIGEO**, each one being entitled to act as proxy for only one Full Member.

10. The work of **INHIGEO** may be discontinued by decision of the Council of IUGS (Statutes VII, 25).

### **INHIGEO Activities at the 28th International Geological Congress Washington, D.C., 1989**

#### **Business Meeting, July 12**

President Gordon Y. Craig opened the meeting at 8:00 p.m.

The first item on the agenda was a report on five years of **INHIGEO** activities by President Craig and Secretary-General, Endre Dudich, entitled *From Moscow to Washington via Pisa*.

As the second item, the Secretary-General announced the results of the elections that had been held by postal ballot early in 1989. The members present voted approval, thereby electing the following **INHIGEO** officers:

**President:** Professor Martin Guntau, of Wilhelm-Pieck University, Rostock, German Democratic Republic. (Former Secretary-General, 1976-1984)

**Secretary-General:** Dr. Ursula B. Marvin, Harvard-Smithsonian Center for Astrophysics, Cambridge, Massachusetts, U.S.A. (Full Member for U.S.A. and Vice President for America)

**Vice President:** Vladimir V. Tikhomirov, Academy of Sciences, U.S.S.R. (Founder and First President)

**Past President:** Gordon Y. Craig, University of Edinburgh, Scotland, U.K.

The following new Full Members were elected to INHIGEO:

Australia	Dr. Barry G. Cooper
Austria	Professor A. Tollmann
Brazil	Ms. Sc. Silvia F. de M. Figueiróa
P. Repub. China	Professor Wang Hongzhu
Czechoslovakia	Dr. J. Haubelt
Hungary	Dr. Gábor Csíky
Portugal	Professor M.C.F. Telles-Antunes
Venezuela	Dr. F. Urbani-Patat

Austria, Brazil, Portugal, and Venezuela are represented for the first time by Full Members of INHIGEO. The other members listed above filled vacancies or were nominated by previous Full Members who wished to be replaced.

The newly elected Corresponding Members are:

Austria	Professor H. Zapfe
Ger. Dem. Repub.	Dr. G. Mathé
Hungary	Dr. József Hála
	Dr. Gy. Vitális
P. Repub. China	Professor Wang Genyuan
	Dr. Sun Ronggui
U.S.S.R.	Dr. I.G. Malakhova

With the elections confirmed, President Guntau and Secretary-General Marvin assumed their new positions on the rostrum. President Guntau thanked Gordon Craig and Endre Dudich for their tireless service to INHIGEO. Each of them traveled widely and worked hard and successfully to generate interest and encourage new membership in INHIGEO. Dr. Guntau pointed out that we owe them our special gratitude because, due to the delay in holding the 28th International Geological Congress, Craig and Dudich served for five years rather than for the traditional 4-year terms.

President Guntau outlined his hopes and aspirations for INHIGEO. Three meetings are in various stages of planning. The XVth INHIGEO Symposium will be held in Beijing in October 1990, the XVIth Symposium will meet in Dresden in September 1991, and INHIGEO expects to hold its XVIIth Symposium in Japan at the 29th International Geological Congress in 1992.

After a discussion period with questions and comments from the floor, President Guntau adjourned the meeting at 9:25 p.m.



## INHIGEO Symposia, Field Excursion, and other Activities at the IGC

INHIGEO sponsored the following three half-day symposiums at the IGC:

### **K1. *The Idea of Time: Changing Concepts of the Antiquity of Man and the Earth***

Chaired by Martin Guntau, Léo F. LaPorte and Cecil J. Schneer

M. Guntau: *Concepts of Natural Law and Time in the History of Geology*

C. Paschoale and S. Figueirôa: *A Study on the Problem of Geological Time: a Semeiotic Approach*

B. M. Hamilton: *Geologists' Changing Perception of Time in the Precambrian throughout the Nineteenth Century*

A. V. Carozzi: *The Concept of Time in Horace-Benedict de Saussure's Unpublished Theory of the Earth (1796)*

E. L. Yochelson: *Geologic Time; as Indicated by the Sedimentary Rocks of North America*

D. D. Milanovsky: *Problems of Time in Geology*

K. S. Murty: *Antiquity of Man and the Earth: Vedic Conceptions*

C. J. Schneer: *The Idea of Time*

### **K3. *The Trans-Atlantic Exchange of Geological Ideas during the Nineteenth Century***

Chaired by Gordon Y. Craig, Endre Dudich and Albert V. Carozzi

S. E. Newcomb: *The Ideas of A.G. Werner and J. Hutton in America*

H. S. Torrens: *The Transmission of British Ideas to America on the Uses of Fossils in Stratigraphic Analysis, 1800 to 1840*

Michele L. Aldrich and A.E. Leviton: *The Silurian System and New York System, 1836-1845*

R. H. Dott, Jr.: *The American Countercurrent--Eastward Flow of Geologists and their Ideas in the Late Nineteenth Century*

S. Figueirôa: *Relations Between Brazil and Germany in the Field of Geological Sciences During the 19th Century*

M. M. Lopes: *Jose Bonifacio de Andrada e Silva's Contribution to the Exchange of Scientific Ideas Between Europe and Brazil in the Field of Geological Sciences*

D. F. Branagan: *Alfred Selwyn--The Australia-North America Geological Connection in the 19th Century*

J. Hála, T. Kecskeméti, T. Póka: *The Hungarian Contribution to the Transatlantic Exchange of Geological Ideas in the 19th Century* (J. Szabó, M. Hantken). (Presented by E. Dudich)

### **K4. *Meteorite Impact: Consequences for the History of Geological Ideas***

Chaired by Ursula B. Marvin and Wolf von Engelhardt

U. B. Marvin: *Meteorite Impact and its Consequences for Geology*

K. Mark: *Meteor Crater: Where It All Began*

W. von Engelhardt: *Ries Crater, Germany, Explained by Meteoritic Impact: Outlines of a Case History*

M. R. Dence: *History of Meteorite Crater Research in Canada*

R. S. Dietz: *Astroblemes (Ancient Terrestrial Impact Scars): Historical Overview*

W. E. Elston and D. Twist: *The Vredefort-Bushveld Enigma of South Africa and the Recognition of Large Terrestrial Impact Structures: Mental Leaps and Mental Obstacles*

K. J. Hsü: *Bolides and Evolution: An Illustration of Dogmatic Resistance to Theories Invoking the Improbable*

INHIGEO also sponsored a field excursion and a poster session. In addition, the Library of Congress mounted *Aspects of Geologic Mapping*, an exhibition of some 70 historic maps, diagrams and globes. The Dibner Library of the Smithsonian Institution held an exhibit of rare books relating to the history of paleontology and stratigraphy.

The field excursion was entitled *Boston to Buffalo, in the Footsteps of Amos Eaton and Edward Hitchcock*. Led by Professors John Rodgers, of Yale University, Thomas Grasso, of Monroe Community

College, and William Jordan, of Millersville University, participants spent 10 days traveling across southern New England and part of New York state by van and canal boat to visit geologic localities, libraries, and museum collections of historical interest.

The poster session on the *History of Geologic Mapping*, mounted by Kenneth Taylor of the University of Oklahoma, featured historic and contemporary maps from around the world.

The response to these events clearly demonstrated that interest in the history of geology is growing rapidly. Each of the symposium rooms was crowded to overflowing. The field trip was well attended, and the poster session drew large numbers of people who wished to examine the exhibit and to ask questions at their leisure.

### **Publications**

The papers presented in Symposium K1, together with some additional manuscripts on geologic time, were published in Volume 8, No. 2, 1989, of *Earth Sciences History*, the Journal of the History of the Earth Sciences Society (HESS). This volume is dedicated to Claude C. Albritton, Jr., one of the original co-convenors of the symposium, who died suddenly on November 1, 1988 (see Commemorations). One of the 1990 issues of *Earth Sciences History* will include the papers of Symposium K3 on the Trans-Atlantic Exchange of Ideas in the 19th Century. An illustrated Guidebook to the field trip was published by the American Geophysical Union.

Special Issue 2 of the Annals of the History of Hungarian Geology, entitled *History of Mineral Exploration in Hungary until 1945*, edited by G. Csiky and Gy. Vitális was distributed at the INHIGEO symposia and business meeting at the IGC.

### **Future INHIGEO Symposia**

The XVth Symposium of INHIGEO will be held in Beijing in the People's Republic of China October 25-31, 1990. The theme of the meeting will be *The Interchange of Geological Thought between the East and the West*. Several one-day excursions will take participants to the Western Hills, birthplace of geological research in China, the Peking Man Museum and Quaternary geology at Zhoukoudian, and other places of geological as well as historical interest. Abstracts received in July, 1990 will be included in the program. Information on abstracts, manuscripts, living arrangements, and costs may be obtained from:

Professor Tao Shilong  
China University of Geoscience  
29 Xueyuan Road  
Beijing 100083, Peoples Republic of China

A booklet entitled *A Brief History of Geology in China*, coauthored by Professors Wang Hongzhen, Xia Xiangrong, and Tao Shilong, published under the auspices of the Geological Society of China and China University of Geosciences, was distributed at the IGC.

The First Circular has been distributed for the XVIth INHIGEO Symposium to be held at Dresden, in what is now the German Democratic Republic, September 9-15 1991. The scientific sessions will focus on *Museums and Collections in the History of Mineralogy, Geology, and Paleontology*. Excursions are planned to museums and historic sites in Dresden-Meissen, the Elbe valley, and historic old Freiberg and the Erzgebirge, redolent of Agricola and medieval mining. Before the meeting, a visit can be arranged to the Mineralogical and Paleontological Museums of Humboldt University in Berlin. After the meeting, participants may attend a colloquium on the history of ideas on paragenesis at Freiberg's Bergakademie, held on the 200th anniversary of the birth of August Breithaupt (1791-1873).

Provisional Registration Forms, enclosed with the Circular, should be returned by August 31, 1990, by participants planning to present papers. Abstracts are due by February, 1991. Copies of the First Circular and other information may be obtained from:

Gesellschaft für Geologische Wissenschaften der DDR  
Sekretariat  
INHIGEO  
Invalidenstrasse 43  
Berlin, DDR - 1040.

Those who submit registration forms will receive the Second Circular in the spring of 1991.

The XVIIth INHIGEO Symposium is expected to take place in 1992 at the International Geological Congress in Kyoto, Japan. We have requested space on the program for at least two INHIGEO sessions and are pleased to report that the First Circular, which was recently distributed, lists *History of Geosciences* among the symposium topics. No details are available at this time, but information will be sent to INHIGEO members as soon as it becomes available.

#### **Activities of the International Union of the History and Philosophy of Sciences**

The Division of History of Science of the International Union of History and Philosophy of Sciences (IUHPS) held the *18th International Congress of History of Science* at Hamburg and Munich in the Federal Republic of Germany, August 1-9, 1989. Participants included INHIGEO President, Martin Guntau, and Vice President, V.V. Tikhomirov. The theme *Science and the Political Order* was intended to embrace all aspects of the historical relationships between science (including technology and medicine) and the manifestations of secular and nonsecular power in all its forms--political, ecclesiastical, and juridical. The program included a symposium on *Failed Innovations* sponsored by the International Committee for the History of Technology (ICOHTEC).

At the meeting of the General Assembly of the Division of the History of Science (DHS), attended by 1,100 participants from 48 countries, the Secretary-General reported that the DHS supported six international meetings and conferences in 1987 and nine in 1988.

The 1987 meetings included *Mapping the Sky: Past Heritage and Future Directions* in Paris, June 1-5; the *Latin American Congress of History of Science and Technology* in Costa Rica, June 8-12; *Jan Evangelista Purkyně*, August 26-29; *Rocks Fossils, and History*, cosponsored by INHIGEO at Pisa-Padova, Italy, September 24 to October 1; *Conference on Technology* at Blacksburg, Virginia, in September; and *Newton and His Mathematics*, in Cambridge, England, September 17-29.

The meetings sponsored in 1988 included *Ernst Mach, Scientist and Historian of Science* in Prague; *R.G. Boscovich* in Rome, May 23-27; a symposium on the *History of Modern Mathematics* New York, June 20-24; the *Latin American Congress of History and Technology of Science* Sao Paulo, June 30 to July 4; the *Eighth International Symposium on the History of Scientific Instruments* London, September 5-10; *National Identity and the History of Geography* at Bundaroon, Australia, in August; *Scientists and their Responsibility* Gerzensee, Switzerland, September 19-22; *Creativity in the Arts and Science* at Locarno, Switzerland, October 6-8; and *Documents and Interpretation in the History of Science* in Philadelphia, December 8-10.



## COUNTRY REPORTS

In the following country reports the names of coauthors appear on the same line; after reports collated from submissions by two or more authors, the names appear one above the other.

### AUSTRALIA 1987-1988

After such notable achievements in 1986 as the publication of an issue of *Earth Sciences History* (Vol. 6, No. 2) devoted to work on Australia and New Zealand, the year 1987 witnessed a period of sustained, if quieter, activity. Like most Australians, our historians of geology looked forward to and prepared for the celebration of the bicentenary of European settlement of Australia in 1988. It is pleasing to report that the significance of earth science and earth materials in Australia's history has been widely acknowledged by organizers of bicentenary events. And history of geology papers have been welcomed by editors of celebratory volumes.

In 1987, David Branagan continued to work on the history of Australian geological mapping, and T.G. Vallance continued his ten-year effort to edit the diary of Robert Brown (1801-1805), an Australian naturalist best known as a botanist.

The highlight for us of the bicentenary celebrations of 1988 was the Ninth Australian Geological Convention held in Brisbane January 31st to February 5th. Coinciding as it did with the national bicentenary, an historical dimension was introduced. Never before has such a convention recognized so publicly our field of interest. T. G. Vallance, a full member of INHIGEO, delivered an invited public lecture on the topic *Finding the way from scratch: opportunity and realization in Australian geology over two centuries*. The lecture was very well attended and provoked much lively discussion. Dr. Vallance conveyed INHIGEO's greetings for the bicentenary to the meeting. An extended abstract of his lecture appeared in the convention volume.

#### Publications:

Among studies in our field published in 1987 the one authored by H. L. Davies deserves special notice, not just for its intrinsic merit but because it marks the first time that the journal where it appeared has published such a work on an historical theme. One hopes the precedent will be followed.

H. L. Davies, "Evan Richard Stanley, 1885-1924: pioneer geologist in Papua New Guinea," *BMR Journal of Australian Geology and Geophysics*, 10, 153-177, 1987.

Other publications of 1987 and 1988 include:

- T. G. Vallance: "Geology" - Chapter 11 (87-93) in *Australians: A Guide to Sources* (D. H. Borchardt and V. Crittenden, eds). Fairfax, Syme & Weldon Associates, Sydney, 1987. This chapter, with a strong historical flavor, forms part of Volume VII of an 11-volume collection under the general title *Australians: A Historical Library*.
- T. G. Vallance and D. F. Branagan: "The Earth Sciences: Searching for Geological Order," Chapter 5 (130-146) in *The Commonwealth of Science: ANZAAS and the Scientific Enterprise in Australasia 1888-1988*, (Roy MacLeod, ed.), Oxford University Press, Melbourne, 1988. This is a history of geological effort in the Australia and New Zealand Association for the Advancement of Science (ANZAAS), now one hundred years old.
- R. A. Stafford: "The Long Arm of London: Sir Roderick Murchison and Imperial Science in Australia," Chapter 4 (69-101) in *Australian Science in the Making* (R. W. Home, ed.), Cambridge University Press, Cambridge, 1988. This is a study of imperial influence on Australian geological effort in the 19th century.

J. B. Waterhouse, "Revision of the Bivalved Mollusca Described by James Dwight Dana 1847-1849 from the Permian of Eastern Australia." Pap. Dep. Geology Univ. Queensland 12 (2):165-228, with 20 plates, 1988.

T. G. Vallance  
J.B. Waterhouse

## AUSTRIA 1987-1988

### Austrian Geological Society

The Austrian Geological Society applied to the Director-General of the postal administration for an edition of a postage-stamp to be issued in 1989 in commemoration of the 75th anniversary of the death of Professor Eduard Suess. The issue has been approved and the materials for the design and an explanatory note in four languages were delivered by A. Tollmann.

**Publications:** Necrologies were published in the Society journal for Karl Götzinger by F. Brix (325-328), and for Ludwig Kostelka by W. E. Petrascheck (329 f.) in Bd. 80, 1987.

### Geological Institute of the Vienna University

The Archives acquired several geohistoric documents about Alpine geologists, including original manuscripts, field books, letters and also hammers -- in continuation of the tradition begun in the time of Eduard Suess of collecting the papers and equipment of famous geologists.

Prof. A. Tollman's course on the History of Geology (two lessons per week) in the Geological Institute was enlarged in 1988-1989 to *History of Earth Sciences*. This course places strong emphasis on the history of Alpine geology.

Dr. H. Häusler published *Die historische Rolle der Wünschelrute für Aufgaben der Angewandten Geologie* in Mitt. Ges. Geol. Bergbaustud. Österr., 33, 265-286, Wien, 1986.

### Paleontological Institute of the Vienna University

Prof. Erich Thenius published a paper on the history of *40 Jahre Paläontologie an der Universität Wien (1945-1984)* in Jb. Geol. B. A., 128, 227-239, 5 fig., Vienna, 1985; and a short survey, concerning *Otto Ampferer, Begründer der Theorie der Ozeanbodenspreizung*, in Die Geowissenschaften, 6 (4), 103-105, 4 fig., Weinheim, 1988.

Doz. Dr. N. Vavra published two articles, concerning *Fossilien in der Volksmedizin*, Wiss. Nachr., 73, 6-8, 3 Fig., Wien, 1987, and *Fossilien im Volksglauben und Alltag*, Schr. Ver. Verbr. natw. Kenntn. Wien, 126, 193-252, 4 Fig., Wien, 1987.

### Geological Survey of Austria (GBA)

Dr. Tilfried Černajsek, archivist and librarian of the Geological Survey of Austria in Vienna, has continued his archival work and completed his collaborative study with Karl Kadletz on the correspondence between Haidinger and Hauer, the founder and pioneer of the Austrian Geological Survey. This archive will be processed by Dr. Renner from the Manuscript Collection of the Austrian National Library, which registers all literary works of geologists in Austria.

Dr. Černajsek reported on the historical and bibliographical material in this archive at the trilateral meeting in Schemnitz, C.S.S.R. in 1988.

Christoph Hauser gave a necrology for Dr. Oskar Schmidegg, (11/12/85) in Jahrbuch Geol. B.-A., 129, 277-282, Vienna, 1986.

A paper *Zur Geschichte des Schladminger Bergbaues*, has been published by A. Weiss in the volume of A. Matura [ed.]: Arbeitstagung der Geol. Bundesanst. 1987, 118-123, Wien, 1987.

Prof. Dr. Heinrich Küpper has published two articles in Vol. 131 (1) of the Jahrbuch Geol. B.-A., Wien, 1988: a necrology for Rudolf Grill (20/9/1987), 5-9; and an article about Joachim Barrande und der Österreichische Geologenkreis (127-131). He presented an oral report on this subject on November 29, 1988.

### **The Society of the Austrian Students of Geology and Mining**

This organization devoted Volumes 32-33 of their journal to the careers and complete bibliographies of two renowned geologists in celebration of their birthdays:

Vol. 32 (1986) to Prof. Dr. Chr. Exner (70th birthday), by W. Frisch, (1-18).

Vol. 33 (1986) to Prof. Dr. E.H. Weiss (60th birthday), by R. Stern, (1-13).

### **The Museum of Natural History In Vienna**

In 1988, Dir. Dr. H. Kollmann arranged with the State Museum for Mineralogy and Geology in Dresden and the Montanistic Academy in Freiberg to mount an exposition on the *History of Mining in the Saxon Erzgebirge*. Many classic mineral samples from the Vienna Museum were in the display.

F. Roegl and H. J. Hansen gave a redescription with commentary of the rare classic work *Foraminifera described by Fichtel & Moll in 1798. A revision of Testacea Microscopica*, with the reproduction of the 30 original plates, in the Denkschr. nathist. Museum Wien, 3, 143 S., Wien, 1984.

### **Further Geohistoric Publications**

G. Feder: "Zehn Jahre Gebirgsmechanik aus dem Institut für konstruktiven Tiefbau der Montanuniversität Leoben." Berg-u. Hüttenmänn. Mh., 131, 27-41, 24 Fig. Wien, 1986.

E. Kusel: "125 Jahre im Dienste der Verbreitung naturwissenschaftlicher Kenntnisse." Schr. Ver. Verbr. naturw. Kenntn. Wien, 126, 21-35, Wien, 1987.

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A. Tollmann

## BRAZIL 1987-1988

The first Brazilian Colloquium on the History and Theory of Geological Knowledge was an important landmark in the development of these scientific fields in this country.

The Colloquium took place in Campinas, State of São Paulo, from July 5 - 8, 1988, sponsored by the Department of Geological Education at the University of Campinas and the Geological Institute of São Paulo. It was cosponsored by INHIGEO and the Brazilian Society for the History of Science. Among the eighty participants were five colleagues from INHIGEO, Prof. Martin Guntau (GDR), Drs. Hugh Torrens and John Thackray (U.K.), Dr. Franco Urbani (Venezuela), and Prof. Alexander Ospovat (USA). During the opening session each of these participants, and Silvia Figueirôa, the Corresponding Member from Brazil, addressed the meeting to explain the history, major purposes, and activities of INHIGEO.

More than 25 lectures covered a wide range of topics, including an industrial-archeological perspective on iron ore mining in Ipanema, São Paulo, which dates back to the 16th century, (M. D. Andreatta); problems of mineralogy and mining in the 16th century (A.M.A. Goldfarb and M.M. Ferraz); and mining in Brazil during the Dutch invasion of the mid 17th century (H. Herrmann and R. M. Cavalcante). There were lectures on kinds of paper formerly made of asbestos (J.W.A. da Ponte), on aspects of 19th century geology in Brazil, such as the controversy between the Geological and Geographic Commission and the Polytechnic in São Paulo (S. F. de M. Figueirôa), as well as on the part played by museums in the history of geology in Brazil (M. N. Lopes).

A number of speakers raised methodological, theoretical, and philosophical issues such as the history of the theory of geosynclines and of plate tectonics (P.W. Gonsalves); the concept of evolution in geological thinking (W.S.T. de Souza); the development of theories in geomorphology (A. Christofolletti); and the impact of semiotics on geology (C. Paschoale).

Contributors from outside Brazil discussed topics such as the history of geology in 19th century Venezuela (F. Urbani, Venezuela); the relations between the Geological Society of London and Latin America (J. Thackray, U.K.); the geological works of John Mawe (1776-1829) and his travels in Brazil (H. Torrens, U.K.); and the relationship between the present and the past of the Earth as an epistemological problem (M. Guntau, GDR).

These lectures were supplemented by a panel discussion by leading scientists who have played a decisive part in geological research and teaching of geology in Brazil in this century. Half a day was dedicated to a round table discussion with historians and archivists on how to secure sources on the history of geology in Brazil. On the final day the participants went on a field trip to the historic iron mining district of Ipanema that has been active since 1590. They also visited a number of sites where they could observe water-powered machinery, blast furnaces, charcoal burners, and other relics dating back to early stages of industrialization in 19th century Brazil.

All activities were recorded on video, including a special interview with INHIGEO members, and one with Professor Umberto Giuseppe Cordani of São Paulo, the president of the International Union of Geological Sciences (IUGS). Professor Cordani stated that the colloquium was very important for geology in Brazil and that the work of INHIGEO is of enormous importance worldwide, because, in common with all activities of mankind, geologists need to preserve their memory of how their science is done.

This first meeting on the history of geology in a Latin American country was highly successful and set an example that certainly will be followed by further initiatives.

*Silvia F. de M. Figueirôa  
Martin Guntau*



## BULGARIA 1988

### 100th Anniversary of Sofia University (1888-1988)

This year the Kliment Ohridski University of Sofia, patriarch of Bulgarian universities, completed its first century. Among other celebrations, a scientific conference organized by the Faculty of Geologic-Geographical Sciences was held on 14 June 1988. The Geology Section opened its first meeting with a plenary session where Professor Todor Nikolov elaborated on the theme: *Development of Geological Sciences at Sofia University*. The meetings continued with a series of technical papers in two separate sections, Geology and Geochemistry.

At the Geology Section the following papers were read: *Basic principles of tectonic zoning on the territory of Bulgaria*, by Professor Zhivko Ivanov; *Coal districts in Bulgaria*, by Professor Georgi Shishkov; *Paleontology and stratigraphy on the threshold of XXI century*, by Professor Todor Nikolov. Other papers were presented by St. Moskovski, N. Yolkichev, G. Georgiev and K. Markov.

At the Geochemistry Section papers were presented on *Metallogenic systematics of deposits of lead and zinc*, by Professor Boris Kolkovski; *Isotope investigations of sulphur and lead and their significance in clarifying the conditions of mineral formation*, by Professor Vesselina Breskovska and Kamen Bogdanov; *Basic requirements to the classification and nomenclature of igneous rocks*, by Professor Maria Stefanova; *The role of diffusion in the formation of the granite layer of the earth's crust*, by Professor Vassil Vergilov and Ilia Vergilov; *Cenozoic magmatism in Bulgaria-state and problems*, by Professor Bozhidar Mavrudchiev. Papers also were read on particular problems by N. Kuneva, M. Zhelyazkova, Bl. Guenov, Il. Vergilov, V. Kurchatov, Sr. Petrov, G. Kirov and Al. Philipov. The conference continued with a poster session. Reports were presented by D. Dimov, G. Georgiev, S. Vulcheva, V. Salabasheva, St. Lefterova, I. Todorov, Zdr. Iliev, V. Vladimirov, D. Tzonev, P. Petrov, V. Kurchatov, Gr. Eskenazi, Ev. Djurova and L. Ivchinova.

At the closing meeting Professor B. Kamenov and Hr. Pimpirev presented information on "First results of the Antarctic expedition 1987-1988."

### Gold ornaments from the prehistoric necropolis near Varna.

Research has continued on a necropolis, discovered by accident during excavation for a new building in 1972. It has been found to contain 81 graves within an area of 3,000 square meters. Twenty of the graves have yielded more than 2,000 gold ornaments with an average weight of 6 kg and average purity of 23.5 carats. The carbon-14 method dates the necropolis from about 4,000 to 4,200 B.C., in the second half of the neolithic epoch. Bulgarian archaeologists named this the Chalcolithic epoch, and that name was accepted by the international scientific community. On the basis of their observations, the Bulgarian archaeologists constructed the Karanov chronological system--a new Neolithic-Chalcolithic stratigraphy. The necropolis is rich in flint and copper tools and many other objects, but the finely-worked gold ornaments are of special interest as they indicate the existence of a highly developed Chalcolithic civilization, possibly the oldest in Europe, at that site.

G.K. Georgiev  
I.Z. Stoyanov  
P.K. Bonev

## CHINA 1987-1988

On the occasion of the 110th Anniversary of the birth of Zhang Hongzhao (H. T. Chang, 1877-1951), the founder of geological studies in China, his son, Professor Zhang Yuanlong, donated his father's collection of about 530 pieces of cultural relics and manuscripts to the museum of Wuhan College of Geology. As a commemoration for Zhang Hongzhao, a special meeting was held at the college on the 2nd and 3rd of April 1987. At the opening session, on behalf of the College, the Secretary-General Bi Kongzhang handed a certificate of merit to Professor Zhang Yuanlong for his invaluable donation. This splendid collection was exhibited in a special room to the keen interest of all participants.

The afternoon session of the meeting on April 2nd was on the theme: *The important contributions of Zhang Hongzhao to Chinese geology as a whole*. Three speakers dealt with the history of geological science, the geological survey, and geological education in China.

Two posthumous works of Zhang Hongzhao entitled *Treatise on Precious Stones* (Baoshi Shou, 1930), and *Autobiography at the Age of Sixty-Six* (Liulu Zishu, 1942) were published by Wuhan Geological College Press in January 1987, and March 1987, respectively.

Ding Wenjiang (V. K. Ting, 1887-1936) was one of the founders of Chinese geological science. On the occasion of the 100th anniversary of his birth, a Chinese version of Charlotte Furth's: *Ting Wen-chiang: Science and China's New Culture*, Harvard University Press, East Asia Series 42, Cambridge, Mass., 1970, (in English) was published by Hunan Scientific and Technological Publishing House, March, 1987. It consists of a new preface written by Professor Huan Jiqing and a translator's postscript by Professor Ding Zilin.

The Fifth Symposium of the History of Geology Division of the Geological Society of China (HGGSC) was held at Peking University, Beijing, between October 5th and 7th, 1987, with more than 100 people in attendance. At the opening session, with Professor Wang Hongzhen, President of the History of Geology Section in the chair, congratulations were offered by members and guests of the Geological Society of China. These included Professor Ding Shisun, President of Peking University, Professor Huang Jiqing, Past-President of the GSC, Professor Cheng Yuqi, President of GSC, and Professor Xia Xiangrong, Past-President of the HGGSC. The topic of the Symposium was *The History of Chinese Geological Work at its Early Stage*. The papers fell into four groups:

1. History of the early pioneering geological works in Chinese geology
2. History of Chinese geological education
3. History of the Chinese Geological Survey
4. Deeds of the late outstanding Chinese geologists

At the closing session it was agreed that some of the papers of the Symposium will be edited by Wang Hongzhen and Sun Ronggui and published by the Peking University Press, partially in commemoration of Professors V. K. Ting and H. T. Chang. HGGSC Newsletter (Serial No. 4, 1988) contains a brief account of the commemorative meeting for Dr. V. K. Ting and Professor H. T. Chang and of the Fifth Symposium on the history of geology in China.

The Sixth Symposium on the History of Geological Sciences in China was held in Beijing from October 31 to November 2, 1988, organized by the HGGSC and the China University of Geosciences in Beijing. About 50 delegates from various universities and institutes attended the meeting.

Professor Zhai Yusheng, President of the University, welcomed the participants. Professor Wang Hongzhen delivered the opening address, and Professor Huang Jiqing, Honorary President of the Chinese Academy of Geological Sciences, gave a short talk about the history of geology in China.

Over half of the 50 papers dealt with the geological works of foreign geologists in China, including F. von Richthofen, Sven Hedin, Von Lozy, V. A. Obrutchev, Bailey Willis, J. G. Andersson, A. W. Grabau, and P. Teilhard de Chardin. Other papers discussed the history of scientific foundations, petroleum industries,

hydrology, coal geology and glaciation studies. A special session was dedicated to the memory of Professor Xie Jiarong (C. Y. Hsien), a pioneer geologist and the founder of economic geology in China, on the anniversary of his 90th birthday. A number of the Newsletter (No. 1, Serial No. 5, 1989), compiled jointly by HGGSC and the History of Geology Section of China University of the Geosciences (HGCUG), was devoted to this Symposium.

An election of new officers of the HGGSC was held at this meeting with the new bureau consisting of:

President	Wang Hongzhen
Secretary-General	Tao Shilong
Past President	Xia Xiangrong
Past Secretary-General	Li Erong
Deputy Secretary-Generals	Sun Ronggui
	Shi Baohang
	Yang Guangrong

The Committee on the History of Geosciences of the Chinese Society of History of Science and Technology held its Fourth Symposium in Fuzhou, Fujian Province, November 5-10, 1988, attended by 40 members. Forty-seven papers were read and discussed, including some dealing with the history of geographical thinking in China.

In 1987-1988, several courses on the history of geology in China were given in Chinese universities. These include *The History of Geological Undertaking in China*, given by Tao Shilong and Wang Genyuan in China University of the Geosciences (Wuhan).

*Xia Xiangrong  
Wang Hongzhen  
Sun Ronggui*

#### **Memorial Notice**

Professor Li Chunyu (C. Y. Lee) (1903-1988) of the Chinese Academy of Geological Sciences, died on August 7th, 1988, in Beijing. A student of Hans Stille in the mid-1930s, Li worked on the tectonic geology of China, and in the 1940s he acted as Director of the Geological Survey of China. He was among the earliest to apply the plate tectonics theory in interpreting the geology of China. In 1982, he compiled the first tectonic map of Asia incorporating the new principles of plate tectonics. He also wrote several papers on the history of early geological investigations in China.

*Wang Hongzhen*

#### **COSTA RICA 1989**

Early in 1989 the Costa Rican Committee on the History and Philosophy of the Geosciences and Geotechnologies (COHIFIGEO) was founded by the efforts of several scientists and historians at the University of Costa Rica. The new organization is affiliated with the Costa Rican Association of the History and Philosophy of Science (ACOHIFICI). The Committee has initiated contacts with similar national committees in other countries. One member, Gerardo D. Soto, attended the INHIGEO symposia and the business meeting at the IGC in Washington. Membership for Costa Rica has been proposed, and will be placed on the agenda for the fall, 1990, meeting of the INHIGEO Board.

*Ursula B. Marvin*

## CZECHOSLOVAKIA 1987-1988

A seminar was held in Banská Štiavnica (Schemnitz) on 26 November, 1987, on the occasion of the bicentenary of the birth of József Jónàs, an outstanding mineralogist. Papers were presented by J. Gindl on the beginnings of mineral collections in the Banská Štiavnica region; J. Herčko, on the life and scientific activity of J. Jónàs; J. Jancsy, on the *Mineralogical-topographical Manual* of J. Jónàs; and A. Varga on The work of J. Jónàs in Pest, Hungary, in the years 1814-1821.

### Trilateral INHIGEO Symposium

The Trilateral INHIGEO Symposium on the History of Geological Exploration of the Western Carpathians before World War I was held at Banský Studenec near Banská Štiavnica on October 3rd to 8th 1988.

The Symposium was organized jointly by Czechoslovakia, Hungary, and Poland, with participation by Austria and the U.S.S.R. The sponsoring organizations included the Slovakian Society for the History of Science and Technology, the Slovakian Geological Society, and the Slovakian Mining Museum in Banská Štiavnica.

The keynote lecture was given by Professor V. V. Tikhomirov (U.S.S.R.), Past President of INHIGEO, commemorating the 21st anniversary of the birth of INHIGEO.

During three days, papers were presented by participants from Czechoslovakia, Austria, Hungary, and Poland. The Czechoslovakian authors were J. Novák, who dealt with the early interests of European "earth scientists," including G. Agricola, A. F. Marsigli, and F. E. Brückmann, in the geological and mineralogical peculiarities of Slovakia; J. Haubelt discussed Ignaz von Born's contribution to the geological knowledge of the Banská Štiavnica (Schemnitz, Selmec) area and his term "saxum metalliferum" (metalliferous rock); J. Baran assessed the geological work of von Born, Hacquet, Fichtel, and Beudant, with particular regard to their enduring discoveries and interpretations, as well as to the transition from plutonistic, speculative "geognosy" to applied "geology" of modern times.

T. Czernajsek, of Austria, described the importance of the work and the archives of the Geological Survey of Austria (Bundesanstalt) for the history of exploration in the western Carpathians.

Four Hungarian speakers included G. Csíky, who stressed the importance of the Association of Hungarian Physicians and Naturalists for their contributions to knowledge of the geological setting of Slovakia (at that time a part of northern Hungary); P. Papp pointed out the valuable contribution of the Hungarian Carpathian Association to the solution of a number of problems concerning the structure and mineral springs of Slovakia; J. G. Vitális presented interesting data on geological and hydrogeological maps of the western Carpathians dating from the 16th to 18th centuries; J. Hala reported on the early history of the Wielicka salt deposit and its exploitation starting in A. D. 1105.

The Polish speakers included A.S. Kleczkowski who spoke about G.G. Pusch and his geological map of the western Carpathians dated 1817-1821. Z. Wójcik presented the geological work performed by Dionýz Štur in the Polish Carpathians. Z. Wójcik read a lecture on the beginnings of tectonic research in the high Tatra Mountains and on Uhlig's works *On the tectonics of the Carpathians* (1907), and *Geological Observations in the Tatra Mountains* (1908). J. Rzymelka dealt with the mineral "tesinite," with special regard to its first description by B. Hacquet in 1796. W. Narebski discussed the paleoichthyological works of Z. Boniacky concerning the fossil fish of the Carpathian flysch. J. Babicz gave an overview of the history of geocartography of the western Carpathians, and Z. Wójcik dealt with the early studies on stalactites and stalagmites in the southern part of the western Carpathians.

Guided excursions took the participants to the Mining Museum in Banská Štiavnica and the Coin and Medal Mint in Kremnica (Kremnitz).

Ivan Herčko  
Jan Urban



## FRANCE 1987-1988

Every year the French Committee on the History of Geology holds three scientific meetings. Eleven lectures were delivered at these meetings in 1987. The most important were two contributions by President F. Ellenberger. His first talk was devoted to Goropius Becanus, (1518-1572), a poorly known early practitioner of the systematic study of fossils. The second talk celebrated the centenary of the discovery of overthrusts in Provence by Marcel Bertrand (1847-1907). Also important was a contribution by H. Rungs and H. Salvan on *Geopolitics and Mineral exploration in Morocco between 1850 and 1914*.

### Publications

1987 saw publication of Vol. I of the 13th Series of the works of the French Committee on the History of Geology (COFRIGEO), with the following contents:

Routhier, P.: Deux "mineurs" spoliés et emprisonnés ou "la Restitution de Pluton" (1640) par Madame la Baronne de Beausoleil. pp. 1-8.

Ellenberger, F.: Jan Van Gorp (Goropius Becanus), 1518-1572; un pionnier méconnu de l'étude des fossiles au XVIème siècle. pp.9-27.

Vogt, J.: Réactions strasbourgeoises à une prévision de séisme à la fin du XVIIème siècle. pp. 29-35.

Vogt, J.: Un projet original de surveillance volcanique et sismique prévisionnelle dans le domaine rhénan au début du XXème siècle. pp. 37-39.

Gohau, G.: A propos d'un bicentenaire; Constant Prévost (1787-1856) et la théorie du soulèvement. pp.41-48.

Ellenberger, F.: Un centenaire à commémorer; la découverte des charriages de Provence par Marcel Bertrand. pp. 49-56.

Guieu, G.: Cent ans après la découverte des charriages par Marcel Bertrand: une patrie et un moteur pour la Grande nappe de recouvrement de la basse Provence. pp.57-60.

Vogt, J.: La laborieuse naissance de l'Association Sismologique Internationale; la crise de 1903-05. pp. 61-64.

Wyart, J.: Souvenirs: la minéralogie à la Sorbonne entre les deux guerres. pp. 65-76.

Pomerol, C.: Histoire géologique de Paris à travers les noms de rues. pp.77-84.

Rungs, H. et Salvan, H.M.: Géopolitique et recherche minière au Maroc entre 1850 et 1914; quelques considérations nouvelles sur la découverte des gisements de phosphate. pp 85-100.

Ellenberger, F.: Hommage à André Cailleux (1907-1986). pp. 101-113.

In 1988, Volume I was published of *Histoire de la Géologie* by F. Ellenberger. (See Book Reviews)

J. Gaudant

## FEDERAL REPUBLIC OF GERMANY 1987-1988

The Paläontologische Gesellschaft (now in the FRG) was founded 75 years ago at Greifswald by Otto Jaekel. To celebrate this anniversary, our colleagues in the German Democratic Republic organized a special meeting at Greifswald in October, 1987. Some 30 people from West Germany participated in this well-arranged meeting.

In November, 1987, a commemoration of Sir Julius von Haast took place on the occasion of the 100th anniversary of his death on the 16th of August at Christchurch, New Zealand. Haast was born in Bonn. A memorial will be published for him.

The 4th issue of the Bulletin "Mitteilungen" of the Working Group of the History of Geology was published in December 1987. It contains more than fifty bibliographical references from the Federal Republic of Germany.

In 1987 the German library at Frankfurt-am-Main held an exhibition dedicated to the work of geologist Hermann Korn, a pupil of Hans Cloos, who fled from the Nazis for an adventurous life in Southwest Africa.

W. Langer published two papers in 1987. One was a brief study on the early development of the geology of the fossil volcanoes in the Eifel Hills, in which he stressed the often overlooked importance of Swedish scientists during the 18th century. The other was dedicated to the memory of Johann Wilhelm Baumer (1719-1788), a friend of Füchsel.

A memorial exhibition for Johannes Menge (1788-1813) took place in Steinau-an-der-Strasse in 1988, the 200th anniversary of the birth of this "father" of Australian mineralogy. Christian Amstutz read a paper on the scientific importance of Menge, who died at Bendigo, Australia. The exhibition will be the subject of a special publication.

In 1987-1988 a new discussion emerged on the Beringer case of the "Lying Stones." Disputants were Rutte and Vossmerbäumer of Würzburg and Langer of Bonn. The problem remains unsolved to this day.

Hanno Beck, the well-known author of several books about Alexander von Humboldt, retired in 1988. Subsequently, his History of Sciences Department at Bonn University was closed by the government. Fortunately, among the younger scientists of West Germany we have several who are especially active in the history of the geological sciences. These include Gerhard Hofbauer at Erlangen, Bernhard Fritscher at Munich and Reinhard Jaekel at Bochum.

W. Langer

## GERMAN DEMOCRATIC REPUBLIC 1987-1988

The results of recent research on the history of the geological sciences in the German Democratic Republic have been made public in conferences and publications mostly initiated by the remarkably active working group 'History' of the Geological Society of the GDR.

A conference entitled *Scientific Geological and Geographical Travels in History* with approximately 60 participants took place in Görlitz in October, 1987. Twenty papers dealt with scientific expeditions, especially of German scientists in Europe, America, Asia, and Africa.

In 1987 there were a number of exhibitions on the history of geology in the GDR. The Goethe National Museum in Weimar showed *Thuringian Fossils from the Collection of Goethe*. Dr. R. D. Kahlke had selected 150 of the most instructive pieces illustrating both the paleontological interest of Goethe and the history of the geological exploration of Thuringia. During the same year the Dresden State Museum of Mineralogy and Geology mounted an exhibition, prepared jointly with the Styrian County Museum 'Johanneum' at Graz, Austria,

on *3000 years of Mining and Culture in the Eastern Alps*. The Dresden Museum also presented an exhibition, in cooperation with the Vienna Museum of Natural History, on *350 Million Years of Forests*, documenting the evolution of terrestrial vegetable life from the Devonian to the present.

The 1987 activities of the working group 'History' of the Central Geological Institute in Berlin proved to be very fruitful. They focused on geological traditions in Berlin, the history of the German Geological Survey in Nazi Germany, and on the geological activities in the aftermath of the second world war. A number of papers on these topics were published in *Zeitschrift für angewandte Geologie* (Journal of Applied Geology) in 1987.

On the 8th and 9th of January, 1988, the Geological Society of the GDR organized a conference in Schwerin to honor the Danish naturalist and anatomist Niels Stensen (1638-1686) on his 350th birthday. Stensen also served as Bishop of Schwerin (Mecklenburg). On the specified topic, *Nicolaus Stenonius and the natural sciences of his time*, nine speakers reviewed Stenonius' achievements in geology, crystallography and anatomy, and his contribution to the historical development of these sciences. Other papers described the philosophical and scientific thinking in the 17th century with special emphasis on the ideas of Stenonius, Leibniz, and the Jesuit, Athanasius Kircher (1602-1680). A facsimile of Stenonius' work *De Solido intra Solidum Naturaliter Contento*, with a detailed appreciation of his life and work, was issued in time for the conference by Akademie-Verlag (ISBN 3-05-500424-8).

In addition to approximately 50 publications on the history of the geological sciences in periodicals, the first volume of a Niels Stensen biography by Gustav Scherz was published by St. Benno Verlag, Leipzig. H. Wilsdorf is the editor of a splendidly illustrated historical survey entitled *The Mining and Metallurgical Industries: a Cultural History*, which includes numerous important papers about the history of the various branches of geology, published by Edition, Leipzig.

A colloquium was held to commemorate C. A. Gerhard (1738-1821) on the occasion of his 225th birthday. In 1770 Gerhard founded the Prussian Mining College in Berlin and he published a number of books on mineralogy and geology at the close of the 18th century.

The 8th Agricola Colloquy of the Freiberg Mining College, held in June 1988, was dedicated to the mineralogist Friedrich Mohs (1773-1839). The life and work of Mohs were reviewed by H. J. Rösler, of Freiberg, and E. Krajček, of Graz, who emphasized Mohs' talents as a teacher as well as his publications and work for mineralogical museums.

The annual meeting of the Geological Society of the GDR on problems and results of basic research in the geological sciences was held in Greifswald to commemorate Serge von Bubnoff (1888-1957) on his 100th birthday anniversary. A description of Bubnoff's scientific work, by G. Möbus, and of his evolutionary concepts, by M. Triller, made up a special part of the extensive scientific sessions. During the meeting a plaque was unveiled at the building of the Geological Faculty to commemorate Bubnoff's work at Greifswald University. University students had arranged an exhibition focusing on the reconstructed time spiral of Bubnoff.

In October, 1988, about 100 scientists attended a conference, planned and chaired by M. Linke of Halle, on *The Exploration of Australia--Contributions and Studies of Ludwig Leichardt and other German Scientists*. The working groups 'History' of the Geological, Geographical, and Biological Societies chose to hold the conference at Chossewitz near the place in Trebatsch where Leichardt was born 175 years earlier. Guest lecturers included the Australian ambassador and scientists from Australia, the USA, and Poland. Most of the approximately 40 papers delivered will be published in *Zeitschrift für Geographie*.

Among the 50 or so publications on the history of the geological sciences, one deserving special mention is the biography of Alfred Wegener (1880-1930) by U. Wutzke, *Der Forscher von der Friedrichsgracht*, VEB Brockhaus Verlag, Leipzig, 1988, ISBN 3-325-00173-4.

The 4th newsletter of the working groups 'History' and 'Philosophy' in the Geological Society of the GDR

surveys all 1988 publications on these subjects. In addition, P. Krüger describes plans to edit Karl Marx' studies in geology, which are quite extensive.

The working group 'History of Geology' comprises approximately 120 interested persons in the GDR. New officers and members in leadership positions, elected in 1988, are Chairman, P. Schmidt of Freiberg; Vice-Chairman P. Krüger of Berlin, and members G.-R. Engewald of Freiberg, E. Fabian of Greifswald, M. Guntau of Rostock, G. Hoppe of Berlin, G. Mathè of Dresden, and M. Triller of Greifswald.

A 1990 follow-up to the *IVth Bilateral German-Soviet Symposium on the History of Geology*, held in Baku in October 1986, is in preparation in the GDR. These conferences have been held since 1975 and are aimed at investigating the traditions of scientific cooperation between the two countries which, so far, has led to a number of instructive publications.

Martin Guntau

#### HUNGARY 1987-1988

During these years, the full member from Hungary, Secretary-General Endre Dudich, worked tirelessly for INHIGEO. He attended scientific symposia and agency business meetings, handled a continuous stream of correspondence from around the world, compiled and edited the Newsletters, submitted annual reports on INHIGEO activities to the IUGS, circulated ballots at election time, and gained an encyclopedic knowledge of INHIGEO affairs which he readily shared with all who needed his help. INHIGEO has benefited immeasurably from his service. He will be a very hard act to follow.

Ursula B. Marvin

In 1987 the History of Geology Section of the Hungarian Geological Society was very active in cooperating with a number of other institutions of the country.

In February, G. Csíky delivered a lecture entitled *The Transylvanian Hungarian Society for Language Cultivation*. This was a learned society founded in 1793.

Following the retirement of G. Bidló from the post, J. Hala was elected the new Secretary of the Section.

In March, G. Csíky read a lecture on *The history and results of state-financed oil exploration in the Northern Range of Hungary*, and G. Bidló presented a *Commemoration of the mineralogist K. Zimányi*.

March 16-20 an international conference was held on the theme *Development of Science and Technology in Central Europe between 1918 and 1938*. It was organized jointly by the Commissions on the History of Science of the Hungarian Association of Scientific Societies, the Hungarian Academy of Sciences, the National Museum of Technology, and the Budapest Polytechnic. Papers were presented by I. Dobos on *Hydrogeological research in Hungary between the two World Wars*, and G. Csíky on *Oil and gas exploration in Hungary between the two World Wars*.

At the monthly meeting in April, G. Csíky read a paper entitled *100 years from the birth of J. Bányai*, and P. Péter presented a *Commemoration of Gy. Wein*.

In May, G. Szurovy read a paper: *Hungarian contribution to oil exploration in China in the years 1955-1959*.

In September, G. Csíky and E. Dudich participated in the **XIIIth INHIGEO Symposium** at Pisa-Padova, Italy, where they presented a special volume: *Rocks, Fossils and History, Italian-Hungarian Relations in the Field of Geology*, containing 36 papers issued on this occasion. (See Book Reviews in Newsletter 21.)



In November, on the occasion of the 100th anniversary of the birth of L. Jugovics, a memorial plaque was unveiled by A. Mindszenty, Associate President of the Hungarian Geological Society, at a special meeting held at Badacsonytomaj. P. Kertész memorialized the life and work of Professor Jugovics.

At the monthly meeting of the section, G. Csíky read a paper on *J. Pettkó, the first Professor of Geology in Hungary*.

On November 26-27, a conference was organized in Budapest by the same institutions as in March. This time the topic was *Teaching of Science and Technology in Hungarian Universities in the 19th and 20th Centuries*. Two lectures dealt with the geological sciences: G. Csíky, *The Department of Mineralogy, Geology and Paleontology of the Ferenc József University in Kolozsvár, Transylvania, with special regard to the methods of teaching*, and P. Papp and T. Weiszbürg: *Interrelation of collections, teaching, and history of science in Hungarian mineralogy; the history of the mineral collection of Budapest University*.

At the December meeting G. Csíky summed up the year's activities and reported on the **XIIIth INHIGEO Symposium** in Italy.

On March 21st, 1988, the Section for History of the Hungarian Geological Society held the VIth Geohistorical Day under the title *Rocks, Fossils and History*. This was devoted to the Hungarian contributions to the **XIIIth INHIGEO Symposium** held in Pisa, Italy (October 1987). Nine papers were read that focused mainly on the history of research and teaching of paleontology and stratigraphy in the universities of Hungary.

On May 11th, commemorative sessions were held for the 20th anniversary of the death of Gy. Kertai, former President of the Hungarian Geological Society and of the Hungarian Central Office of Geology. On May 16th sessions commemorated the 150th anniversary of the birth of V. Zsigmondy, hydrogeologist.

On October 3-7, 1988, six Hungarian delegates attended the Trilateral (Czechoslovak-Hungarian-Polish) Symposium of the History of the Geological Exploration of the Western Carpathians before World War I. (See Czechoslovakia report).

On November 1-2, G. Csíky presented two papers at the national conference on the History of Scientific, Engineering, and Medical Societies in Hungary. The papers discussed the Transylvanian Museum Society and the 140 year-old Hungarian Geological Society.

A commemorative session was held December 20th on the 40th anniversary of the creation of MTESZ (Union of Hungarian Scientific and Technical Societies). M. M. Tóth discussed the life and work of several outstanding Hungarian naturalists, and reviewed the careers of outstanding Hungarian geologists such as E. Kutassy, K. Papp, and Z. Török.

## **Publications**

Zsámboki, L.: "Beginnings of the knowledge and utilization of coal in Hungary." *Közl. a magyarországi ásványi nyersanyagok történetéből*, vol. III, 5-24, NME Miskolc, 1987.

Juhász, A.: "The history of geological exploration of the Borsod lignite basin from 1786 to 1986," *ibid*, 41-96, 1987.

Némedi-Varga, Z.: "Historical review of mineral resource exploration in the Mecsek Mountains, South Transdanubia," *ibid*, 173-201, 1987.

Csíky, G.: "Hungarian historical sources on crude oil and natural gas." *Bányászati-Kohászati Lapok, Kőolaj és Földgáz*, 20/120, 189-191, 1987.

Csíky, G.: "History of oil and natural gas exploration in Hungary from the beginning till 1918," Part 1, *Földtani Kutatás*, XXX, 45-51, 1987.

- Csíky, G.: "The history and results of the state-financed oil exploration in the Northern Range of Hungary," OMBKE, Keszthely, 439-446, 1987.
- Csíky, G.: "The life and oeuvre of József Jónás, on the occasion of the 200th anniversary of his birth," *Földtani Közlöny* 117, 141-151, 1987.
- Molnár L, Weiss A.: "Ignaz Elder von Born und die Societät für Bergbaukunde." 129 p. Wein, 1986.
- Vitális, G. (ed.): "Past and present of the 70 year old Hungarian Hydrological Society. Ed. of the Hungarian Hydrological Society," 142 p. (in Hungarian), Budapest, 1987.
- Benkő, F.: "Hungarian Mineralogy, i.e. The science of stones and ores." (in Hungarian), Kolozsvár 1786: (Reprint by S. S. Szakáll and T. Weiszbürg, Budapest, 1986).
- Von Calw, U. R.: Systematic and useful booklet on mining (*Bergbüchlein*), 2nd ed. Worms, 1518 (Reprint of the Hungarian translation of the German original) ed. L. Zsámboki, Miskolc-Rudabánya, 1987.
- Scopoli, G. A.: "Crystallographia hungarica." Praga, 1776, 193 p. (Hungarian and German translation, published in "Scriptores rerum metallicarum antiquiores", ed. L. Zsámboki, Miskolc, 1988.
- Dank, V.: "Commemoration on Gy. Kertai, oil geologist, Member of the Hungarian Academy of Sciences (1912-1968)." *Földtani Kutatás* XXXI/1, 3-16, Budapest, 1988.

*Gábor Csíky*

#### INDIA 1987-1988

The International Commission on the History of Geological Sciences (INHIGEO), affiliated to IUGS and IUHPS, was set up during the 22nd International Geological Congress held at New Delhi in 1964.

The late Dr. B.C. Roy, Secretary-General of the 22nd IGC, was the first Indian Full Member of INHIGEO, but activities in India had remained dormant since Dr. Roy's death in 1984. Credit for reactivation goes to Professor Gordon Y. Craig, President of INHIGEO, who visited Calcutta in March 1987. In a discussion with Sri D. P. Dhondial, Director General of the Geological Survey of India, Dr. Craig pointed out the valuable contributions of India towards the development of geological sciences. He suggested that the Geological Survey of India might take the initiative for the documentation of the history of geological sciences in India. Shri S. K. Mukerjee was nominated to become the full member of INHIGEO from India, and he since has been elected.

In order to assure national participation in the task of INHIGEO, a Core Group of Geoscientists was formed by the GSI to deliberate on the issues and make recommendations for a comprehensive National Working Group. The Core Group had its first meeting on 15th May, 1987. They reviewed the long cultural heritage of the history of geological sciences in India and suggested that this could be subdivided into different periods of time such as pre-historic, medieval, and modern. The modern period, which more or less coincides with the use of the English language, gradually evolves into the study and exploitation of mineral resources and culminates in systematic geological surveys and the development of geological teaching and research. The Core Group also felt the need for constituting a broad based National Working Group by involving Universities and State Geological Departments, which have a long history in the teaching of geology and mineral exploration.

The National Working Group constituted thereafter may be construed as the "take off" stage of the current INHIGEO activities in India. During the first meeting of the National Working Group held on September 29 1988, the decision was made to issue a publication to commemorate the founding of INHIGEO in India 25 years ago. This publication will cover some of the following important topics:

1. Medicinal use of minerals in ancient India
2. Development of hydrology from the premedieval period to the present day
3. Ancient history of base metal mining in India
4. Development of the Rajasthan Geological Survey
5. Ancient diamond mining in India
6. Annotated bibliography of geological activity prior to the formation of the Geological Survey of India
7. Geological teaching and research in India

The second meeting of the National Working Group was held on January 16 1989, when the NWG adopted a resolution to name itself INDHIGEO (Indian National Committee for History of Geology). In this meeting, the NWG proposed to organise a National Workshop in late 1989 or early 1990 highlighting the INDHIGEO activities in India. The following subjects were identified for the Conference:

1. Peninsular Geology
2. Himalayan Geology
3. Gondwana and Continental Drift
4. Paleontology
5. Seismology and Geodesy in India

S.K. Mukerjee

#### ITALY 1987-1988

The XVIIIth INHIGEO Symposium, *Rocks, Fossils and History*, held in Pisa-Padova September 23 to October 1st, was the most important event in this period. A report by Past President Gordon Y. Craig appeared in Newsletter 21.

The proceedings of a congress dedicated to Giambattista Brocchi were published early in 1987. The congress, entitled, *L'Opera Scientifica de Giambattista Brocchi, 1772-1826*, had been held at the Museo Biblioteca e Archivio de Bassano del Grappa November 9-10th 1985. This was the first time that Italian scholars had considered Brocchi as both a naturalist and a humanist.

The manuscript catalogs listing fossils in the University of Padova's Museum of Paleontology, founded in 1734 by Antonio Vallisneri, Jr., were collated and published in 1987.

On 12-13 March 1988, the tricentenary of the birth of Anton Lazzaro Moro in 1687 was commemorated by a meeting held in his birthplace, San Vito al Tagliamento in the Province of Pordenone, Friuli. For the occasion his main work of 1740, *De' crostacei e degli altri marini corpi che si trovano su' monti*, was reprinted.

Near the end of 1988 an historical volume was published on the origins of the new Department of Geology, Paleontology and Geophysics at Padova University. Since June 1, 1988, the former Institutes of Geology, Paleontology and Applied Geology have been combined with Geodesy and Geophysics to form the new Department.

#### Publications

Altichieri, L., Brogiato, C., Franco, F., Piccoli, G., and Todesco, F., "I cataloghi del Museo paleontologico dell'Universita di Padova e le collezioni di fossili con relative note bibliografiche." *Mem. Sc. Geol.*, vol. 39, pp. 343-387, 3ff Padova, 1987.

- Mezzacasa, M. and Piccoli, G., "Excursion Guide in the Veneto. The development of geological research in the Venetian region." XIIIth International Symposium INHIGEO, Pisa-Padova, 6+37 p., 11 ff., Padova, 1987.
- Mezzacasa, M. and Piccoli, G., "L'influenza de Moro sul pensiero geological moderno." In Lema Maniago, ed.: Anton Lazzaro Moro, Contributi per una ricerca, 92-101, Provincia Pordenone, 1988.
- Piccoli G. and Mezzacasa, M., "La geologia degli avvenimenti che ispirarono Anton Lazzaro Moro." In: Anton Lazzaro Moro (1687-1987), Atti del convegno di studi, 103-110, 4 ff., Ediz. Comune San Vitro al Tagliamento, Graf. Edit. Artist. Pordenonesi, Fiume Veneto, 1988.
- Piccoli, G. and Stiran Rea L., "Il Dipartimento de Geologia, Paleontologia e Geofisica dell'Università di Padova e le sue origini." 78 p., 11 ff, 1 serie tabl., Soc. Coop. Tipogr., Padova, 1988.

Giuliano Piccoli  
Nicoletta Morello

## POLAND 1987-1988

Scientific work in two main institutions of the Polish Academy of Sciences (the Institute of the History of Science, Education and Technics and the Museum of the Earth) was limited in 1987, due to financial problems. These limitations stopped work on the *Biographical Dictionary of Polish Geologists*, and hampered research on archival materials in the U.S.S.R. Nevertheless, several important papers were published and a dozen scientific sessions and conferences dealing with the history of geological sciences were organized by various institutions and scientific societies.

### 1987 - Conferences

Polish INHIGEO member, W. Narębski, was an invited speaker at the **XIIIth INHIGEO Symposium Rocks, Fossils and History** at Pisa-Padova in 1987. Four papers dealing with contributions of some Polish geologists to Italian geology and to the history of paleontology in Poland were prepared for the symposium by W. Narębski, Z. Wójcik, S. Czarniecki, G. Biernat and J. Wieczorek. Professor A. Bolewski was elected a corresponding member of INHIGEO at the meeting. (For meeting report see Newsletter 21).

The Society of Friends of Mining, Metallurgy and Old Polish Industry in Kielce, in cooperation with the National Museum in Kielce, organized an exhibition dedicated to S. Staszic (1755-1826), and held two scientific sessions. The first one was devoted to the history of geology and exploration of arenaceous Miocene limestones in the region of Pinczow. The speakers, B. Penkala, M. Weber-Kosinska, Z. Wójcik, and others, also discussed the history of exploration of other local raw materials including gypsum, sulfur and mineralized waters.

During the second session, on ethnic minorities in the region of Kielce, Z. Wójcik reviewed the activity of Saxon and Russian geologists and miners in the Świętokrzyskie (Holy Cross) mountains in the 19th and 20th centuries.

The Polish Society of Friends of Earth Sciences organized in Cracow an exhibition *Save It From Destruction*, with a very interesting historical part prepared by S. Czarniecki to commemorate the activity of Professor S. Małkowski on the 25th anniversary of his death. During scientific meetings of this Society, J. Rzymek discussed the 19th century studies of W. Blandowski in Australia, and Z. Wójcik recounted the history of mineral collecting in Poland.

At scientific sessions organized by the Polish Geophysical Society in December, 1987, to commemorate the 125th anniversary of the birth of Maurycy P. Rudzki, S. Czarniecki and Z. Wójcik discussed various aspects of his geological investigations.

In December 1987, the Association of Polish Geodesists organized a scientific session and exhibition to celebrate the geodetic, geophysical and geological achievements of Stanisław Pawłowski.



## Publications

In the monograph *History of Polish Science*, edited by the Institute of the History of Science, Education and Technics of the Polish Academy of Sciences, Stanislaw Czarniecki published the *Outlines of the History of Geology in the Years 1863-1918*.

In the Quarterly Journal of History of Science and Technics, edited by the above Institute, S. Czarniecki and W. Narębski published a short paper on the contacts of vulcanologist Maurycy Komorowicz with the Jagellonian University. Andrzej Bolewski has submitted for publication a detailed paper on the history of mineralogy in Poland after World War II. The same author has published his memoirs on the foundation in 1951 of the Mining Department with a chair of geology at the Silesian Polytechnics in Gliwice, and has prepared a detailed paper on the martyrdom of Polish scientists during World War II.

1987 saw publication of the *Biographical Dictionary of Polish Biologists*, edited by the Institute of History of Science, Education and Technics, Polish Academy of Sciences, with biographies of paleontologists and zoologists prepared mainly by S. Czarniecki and Z. Wójcik.

Zbigniew Wójcik has written for Wydawnictwa Lubelskie, editors, a biography of Ignacy Domeyko, a well-known Polish mineralogist. He also has published several articles on the opinions of S. Staszic on science, has coauthored with J. Roziewicz a biography of the eminent historian of technology, M. Radwan, and has issued a volume of source materials, *Reports of the meetings of the Ore Commission 1782-1787*, documenting the activities of Polish geologist J. F. Carosi (1749-1799), a corresponding member of the Academy of Sciences in Petersburg.

Several theses for scientific degrees have contributed to the history of geological sciences:

- a) Habilitation thesis of J. Rzymelka on the history of geologic exploration of Upper Silesia, published by Silesian University in Katowice.
- b) Ph.d. thesis of H. Harasimiuk on teaching geology in Polish secondary schools in the period 1795-1863 (supervisor Z. Wójcik).
- c) Ph.d. thesis of J. Bogacz dealing with the history of exploration of mineral resources of Lower Silesia (supervisor J. Janczak).

Plans were laid for a celebration in 1989 of the 70 years of activity of the State Geological Institute by publishing the history of this institution during World War II, prepared by E. Rühle and S. Tyski. In its monthly periodical *Przegląd Geologiczny* (Geological Review), several historical articles have been published, including one on old mines by E. Ciuk, on the water supply for Vienna by J. Malinowski, and short biographies of K. Bohdanowicz (by J. Roziewicz and Z. Wójcik) and of K. Wójcik (by Zb. and Zd. Wójcik).

## 1988

In 1988, systematic studies of the history of geological sciences in Poland were carried out in several institutions and societies, including the Museum of the Earth and Institute of History of Science, the Education and Technics Branch of the Polish Academy of Sciences in Warsaw, the Museum of the Geological Department of Warsaw University, and the Society of Friends of Mining, Metallurgy and Old Polish Industry in Kielce.

W. Narębski and Z. Wójcik cooperated in the organization of the Trilateral Czechoslovakian-Hungarian-Polish Symposium on the *History of Geological Exploration of the Western Carpathians before World War I*, held in Banská Štiavnica in October 1988 (see Czechoslovakia report).

In the Museum of the Earth, studies focused partly on biographical research and partly on geology in Polish university centers in the 19th and 20th centuries. Z. Wójcik collected materials for a biographical dictionary of Polish geologists, and W. Narębski worked on a biography of Z. Bosniacki. J. Garbowska was investigating archival materials of Wilno University, and Z. Wójcik investigated those from higher schools in Warsaw. In the Museum of the Geologic Department of Warsaw University, A. Pelc collected source materials,

dating back to 1915, on the history of geology in this higher school. The Society of Friends of Mining, Metallurgy and Old Polish Industry in Kielce collected data concerning, mainly, the history of mining and geology in the region of the Góry Świętokrzyskie Holy Cross Mts. These materials are being reworked for publication by Z. Rubinowski, A. Rembalski, J. Szczepański and Z. Wójcik. Some of these materials deal with the history of the Academic Mining School in Kielce, which existed in the years 1816-1826.

Several scientific sessions, accompanied by special exhibitions, were devoted to outstanding Polish scientists. Two of them dealt with the activities of J. Samsonowicz (1888-1959), a professor at Warsaw University; the others with those of Prof. J. Zwierzycki (1888-1961) of Wrocław University and of Professor A. Wodziczko (1887-1948) of the University of Poznań. Numerous interesting lectures were presented on geology, the protection of nature, and the history of mining and metallurgy in Poland in the 20th century. Particularly important was the exhibition on J. Samsonowicz, organized by A. Pelc in the Museum of the Geological Department of the Warsaw University.

The 100th anniversary of formal studies of paleobotany in Poland was celebrated by a scientific session in Cracow, organized by the Paleobotanic Section of the Polish Botanical Society. Lectures on W. Szafer, D. Štur, and the development of this science in our country were presented by M. Reyman, B. Słodowska, H. Kmiecik and Z. Wójcik. The problems were best illustrated and documented by the excellent exhibition, prepared by S. Czarniecki, on the history of paleobotanical studies in Cracow.

A group of Polish scientists active in the field of the history of geology, participated in the Trilateral INHIGEO Symposium on the History of Geological Exploration of the Western Carpathians before World War I, at Banský Studenec in Czechoslovakia from October 3 to 7. (See Czechoslovakia report).

A cycle of lectures on historical problems was continued by the Museum of the Academy of Mining and Metallurgy in Cracow lead by M. Wirska-Parachoniak. A. Bolewski delivered a lecture on the history of mineralogy after the World War I. On the occasion of the 70th anniversary of the independence of Poland, numerous sessions and exhibitions were organized by geological institutions. An exhibit on the achievements of Polish geology in the years 1914-1922 were presented in the Museum of the Earth in Warsaw.

Several interesting publications have appeared, such as the monograph of J. A. Rzymek, *The history of geologic exploration of the Upper Silesian Coal Basin before 1870*, and the paper of A. Bolewski, *Mineralogical Sciences in Poland after the World War II*. J. Popiołek's paper on the conceptions of English naturalists in 17th century, and J. Garbowska's and B. Studencka's paper on archival materials concerning scientific achievements of Polish geologists in the collections of the Museum of the Earth, were published in the 39th volume of Proceedings of the Museum of the Earth. Another of J. Garbowska's papers, *Geological studies carried out by the Wilno scientific center in the years 1781-1832*, has appeared in vol. 141 of the *Monographs on the History of Science and Technics*. Z. Wójcik's sketch on the history of Earth Sciences at the Warsaw University before 1915 was published in vol. 33 of *Przegląd Geofizyczny*. One of the volumes (II(1)) of the *Studies on the History of Polish Science* was devoted to J. Smoleński (1881-1940), geologist and professor of geography at the Jagellonian University in Cracow.

(See Book Reviews and Commemorations for additional items from Poland).

The Mineralogical Society of Poland has prepared a special volume of its periodical *Mineralogia Polonica*, dedicated to the 100th anniversary of the death of I. Domeyko in 1989. The Society plans to hold a special meeting and to establish a prize to celebrate the memory of this eminent Polish mineralogist, who is renowned for his contributions to Chilean and world mineralogy.

Wojciech Narębski Zbigniew Wójcik

## PORTUGAL 1987-1988

1987 saw publication of the papers presented at the 1986 colloquium on the *History and Development of Science in Portugal up to the End of 19th Century*, sponsored by the Academia das Ciências de Lisboa. Included are articles on mineralogy by M. Portugal Ferreira, structural geology by A. Ribeiro, and paleontology by M. T. Antunes.

In November, 1988, a second large national colloquium was sponsored by the Academia das Ciências. This one supplemented the 1986 meeting by treating the *History and Development of Science in Portugal in the 20th Century*. The program included several new contributions relating to the history of the geosciences.

A paper has been prepared for publication by members of the Faculdade de Ciências e Tecnologia, Universidade Nova de Lisboa, on the history of the teaching of geosciences in Portugal.

### Memorial Notice

Fernando M. C. Correia (1944-1988), for some years he fought against disease, precariously surviving long enough to complete his thesis on the Cretaceous of the Algarve, Southern Portugal, that includes a historical chapter.

M. Telles Antunes

## SWEDEN 1987-1988

A symposium on the structure and development of the Caledonides in Scandinavia and related topics was organized by the Geological Society of Sweden, in Lund 19-20 May 1988, to celebrate the centenary of A. E. Törnebohm's introduction of the new ideas of thrust tectonics as a model for the orogenesis of the Scandinavian mountain chain. A summary in English of A. G. Högbom's biography (1912) of Törnebohm was prepared for the meeting by A. Rodhe.

A Center for History of Science was established in 1988 as an international institute under the auspices of the Royal Swedish Academy of Sciences in Stockholm. The purpose of the Center is to stimulate and support research in the history of science with particular emphasis on the Academy's own archives dating back to the early 18th century. The archives are of great importance for the history of geology. The Director of the Center is professor T. Frängsmyr, a corresponding member of INHIGEO.

### Publications

Ahlström, C. G., Ekström, P. and Regnéll, G.: "Niels Stensen. Anatom, naturvetare och hans väg till den Katolska kyrkan." Sydsvenska medicin-historiska sällskapets årsskrift, vol.2, 7-35, Lund, 1988.

*Summary:* A short survey is given of the achievements of Niels Stensen (1638-1686) in anatomy and geology. In anatomy he worked in the frontline and was fully recognized during his lifetime. In geology he was far ahead of his time and his contributions were fully recognized first in the 19th century. A description is given of Stensen's conversion to the Catholic Church.

Damberg, A.: "Fossilsamlaren Gustaf C. von Schmalensee (1842-1919)." SGU information 1987, 3, 12-16. Uppsala, 1987.

Frängsmyr, T.: "Otto Torells reseberättelse 1862-63." Lychnos 1986, 127-148, Uppsala, 1987.

*From the author's summary:* Otto Torell (1828-1900) was a Swedish geologist who began studying glacial phenomena early in the 1850s. He travelled to many countries including Switzerland, Norway, Iceland, and Spitzbergen, and initiated the first Swedish polar expeditions: all in the quest for proof of Louis Agassiz'

glacial theory. In many respects Torell's own work emended and completed this theory.

Laufeld, S.: "Moberg, Johan Christian (11.2.1854-30.12.1915)." *Svenskt Biografiskt Lexikon*, 25, 548-551, Stockholm, 1987.

Regnéll, G.: "Sven Nilsson (8.3.1787-30.11.1883)." *Levnadsteckningar over Kungl. Vetenskapsakademiens ledamöter*, 189, 16 p., Stockholm, 1988.

Damberg, A.: "SGU:s reguljära kartserier - de första 50 åren." (The regular map series of the Geological Survey of Sweden - the first 50 years). *SGU information* 1987, vol. 2, 6-10, Uppsala, 1987.

Damberg, A.: "SGU:s organization, en återblick över 130 år." (The organization of the Geological Survey of Sweden, 130 years in retrospect). *SGU information* 1988, vol. 5, 8-12, Uppsala, 1988.

Frängsmyr, T.: "Revolution or evolution: how to describe changes in scientific thinking (with several examples from the history of geology)." In: Shea, W. R. (ed.): *Revolutions in Science: Their meaning and relevance*, 164-173, 1986.

Rasmussen, L. B.: "En jordisk krönike. Traek af DGU's historie 1888-1988." 114 p. Odense, 1988. (A chronicle of the first hundred years of the Geological Survey of Denmark).

Wickman, F. E.: "The first years of *Geochimica et Cosmochimica Acta*." In: Maxwell, E. (ed.): *Robert Maxwell and Pergamon Press*, 575-576, 1988.

Hedberg, Hollis D.: "Daniel Tilas' 1740 work on stratigraphy and petroleum occurrence in the Siljan region." (See Book Reviews).

#### **Memorials**

"Tove Birkelund, 28 November 1928 - 24 Juni 1986." Christensen, W. K., Surlyk, F. and Sørensen, H., *Dansk Geologisk Forening, Årsskrift for 1986*, 83-91, Odense, 1987.

"Tove Birkelund, (28.11.1928 - 24.6.1986)." Noe-Nygaard, A., *Det Kongelige Danske Videnskabernes Virksomhed 1986-1987 (Annual Report)*, 163-170, København, 1987.

"Sven Föyn (1908-1987), In Memoriam." Naterstad, J., *Norsk Geologisk Tidsskrift*, 67, (printed in the U.K.), 155-157, Oslo, 1987.

"Oskar Kulling - en geologiens detektiv." Zachrisson, E., *SGU information*, 3, 4-6, Uppsala, 1988.

*G. Regnéll*

### **UNION OF SOVIET SOCIALIST REPUBLICS 1987-1988**

#### **Symposia, Meetings, Conferences and Celebrations: 1987**

##### *February.*

Tallinn, Estonia. Conference on the history of research on the Kaaliyarv meteorites.

Tallinn, Estonia. Conference: *Foundation of the Geological Institute of the Academy of Science in Estonia 40 years ago.*

Moscow State University. Celebration of the 80th birthday of A. A. Bogdanov.

##### *March*

Moscow State University. Celebration of the 85th birthday of N. B. Wassoievich, Corresponding Member



of the U.S.S.R. Academy of Sciences.

*April*

Moscow. Annual meeting of the Commission of the Academy of Sciences on the History of the Geological Sciences in the U.S.S.R.

*June*

Minsk, Byelorussian S.S.R. Symposium on the topic *The role of A. M. Zhirmunsky, Corresponding member of the Byelorussian Academy of Sciences, in research on the geology, hydrogeology, geomorphology, tectonics, and mineral resources of Byelorussia*, on the occasion of the centenary of his birth.

*September*

Tashkent, Uzbek S.S.R. (Central Asia), Celebration of the 75th birthday of H. M. Abdullaev.

Professor V. V. Tikhomirov took part in the **XIIIth International INHIGEO Symposium**, September-October, 1987, in Pisa-Padova, Italy.

*October*

Novosibirsk, Russia (Siberia). Conference on *Problems of Evolution in Geology: the Historical Aspects*.

*November*

Leningrad, Russia. Symposium, *Aspects of the historical development of petrography-petrology*, on the occasion of the 90th anniversary of the birth of N. A. Elisseev, Corresponding Member of the USSR Academy of Sciences.

**1988**

*March*

Tashkent, Uzbek S.S.R. Conference to mark the 125th birthday of V. I. Vernadsky.

Tallinn, Estonia. Conference on 70 years of the Geological Survey of Estonia.

Leningrad. Conference on *The Humanism of V. I. Vernadsky: The methodological importance of the theoretical ideas of Vernadsky in the present time*.

*April*

Kiev, Ukrainian S.S.R., General Conference on the History of Science and Technology with a special symposium on the history of earth sciences.

Dushanbe, Tadjik S.S.R. (Central Asia). Conference to mark the 100th birthday anniversaries of B. D. Lichkov (1888-1966) and S. F. Mashkovzev (1888-1949), and the 60th birthday of M. H. Hamideov. The three men specialized in the geology of Tajikia.

*May*

Leningrad. Symposium on the history of geology and geochronology to mark the 100th birthday of A. A. Polkanov.

*October*

Syktyvkar, Komi. Annual meeting of the Commission on the History of Geological Sciences in the U.S.S.R. (Academy of Science); the theme was *History of the Geological Research Work and the Search for Mineral Deposits in the European North-Eastern Part of Russia*, Conveners: V. V. Tikhomirov and N. P. Jushkin

V. V. Tikhomirov took part in the Trilateral Symposium (Poland, Hungary, Czechoslovakia) in Banská Stiavnica on the history of geological research in the western Carpathian mountains before World War I. (See Czechoslovakia report).

## **Publications**

Nekhoroshev, V. I.: "The Evolution of Mobilism from A. Wegener to Plate Tectonics." Ed:VIEMS, 52 p., Moscow 1986.

Popov, A. I.: "The Way to the Cambrian: a Few Pages from the Life of Professor V. M. Seniukov." Syktybkar, Komi, 1987.

Rezanov, I. A.: "History of Ideas on Geotectonics." Moscow, 1987.

Smirnov, V. I.: "Plutonism and Neptunism and the Evolution of Concepts on Ore Deposits." Moscow, 1987.

Vernadsky, V. I.: "Papers on a General History of Science." Moscow, 1988.

-----: "Papers on a History of Science in Russia." Moscow, 1988.

-----: "Philosophical Ideas of a Naturalist." Moscow, 1988.

-----: "Sources for His Biography." Moscow, 1988.

In 1987, Dr. E.G. Malkhasian and coauthors published articles in books and journals on the research work of Russian geologists in Armenia during the 19th century, and on the Russian petrologist "Warden Lodochnikov, 1887-1943,"

In 1988, Dr. Malkhasian, Chairman of the Council on the History of Geological Sciences of the Academy of Science in the Armenian S.S.R., prepared a second volume "History of Geological Sciences in Armenia during the 20th Century."

## **Memorial Notes**

"D. V. Nalivkin (1889-1982)." Nalivkin, V.D., Ed. Nauka, 278 p., Moscow, 1987.

"P. A. Tutkovsky (1858-1930), Geologist and Geographer." Onoprienko, V. I., Ed. A.S. Povarennykh, Nauka, 154 p., Moscow, 1987.

"D. I. Cherbakov (1893-1966)." Wolfson, F. I., Zontov, N. S. and Shushania, G. G., Moscow, 1987.

"V. A. Rusanov (1875-1913?)." Korakin, V.S., Moscow, 1987.

## **Announcement**

In order to study the unpublished scientific manuscripts of the important Russian geologist A. P. Karpinsky (1846-1936), who was President of the Academy of Science of the U.S.S.R. from 1917 to 1936, the Academy has established a Commission. The plan is to organize annual memorial meetings in order to introduce or read unknown manuscripts by Karpinsky, and to prepare to print unpublished letters he exchanged with geologists around the world.

*V.V. Tikhomirov*

## **UNITED KINGDOM 1987-1988**

During this period, President Gordon Y. Craig was very active in the interests of INHIGEO. In addition to carrying out the day-to-day demands of INHIGEO business, he visited India in 1987 where he was instrumental in reactivating India's full membership in INHIGEO. Also in 1987, he attended INHIGEO's XIIIth Symposium at Pisa-Padova, Italy. 1988 was an exceptionally busy year of planning symposia and preparing for a change of

officers at the 1989 IGC in Washington. Under his guidance all of this took place smoothly and efficiently. Gordon Craig left office with INHIGEO larger and more active than ever before.

*Ursula B. Marvin*

### **The Eyles Memorial Symposium**

This special meeting was held in Bristol, England, from 29 to 30 September 1988, under the auspices of the British Society for the History of Science. Forty five delegates attended, including many former friends of Joan and Victor Eyles, each of whom was a highly distinguished historian of geology.

The theme of the meeting was the history of geology in the century or so up to 1839, the year of the death of William Smith. The main speakers on the first day included Hugh S. Torrens on the use of fossils in stratigraphy from 1800 to 1840; Jack Morrell on the legacy of William Smith--the case of John Phillips; Paul Marston on religion and geological methodology in the early 19th century; Karen Cook on the design of geological maps in England before 1840--insular or innovative?; David Cumming on G.B. Greenough's image of Indian geology; and D.T. Donovan on aspects of early 19th century geological literature.

After the sessions, by courtesy of Dr. Peter Crowther of Bristol City Museums and Art Galleries, participants visited the Eyles' Library of geological books and maps, now housed in a special room in Bristol University Library. The day ended at Goldeney Hall, with a visit to a historic 18th century grotto in the garden followed by a banquet.

On September 30th there was a field trip to localities associated with William Smith in the Bath area, and afternoon talks by David Price on John Woodward and the empirical investigation of the earth in the late 17th and early 18th centuries; Brian Taylor on geological grand tours of France and Spain in the 18th century; and C.W.P. MacArthur on Dr. Berger of Geneva (1779-1833)--from Travelling Fund to the Wollaston Donation.

For related readings see:

Torrens, Hugh S., "Joan Mary Eyles, nee Biggs (1907-1986)." *British Journal for the History of Science*, 20, 349-350, 1987.

-----, "Obituary: Mrs. J. M. Eyles (1907-1986)." *Annual Report of the Geological Society of London* for 1986, 23-24, 1987.

*John Ch. Thackray  
Hugh S. Torrens*

### **Honors**

Martin J.S. Rudwick, a corresponding member of INHIGEO from the United Kingdom, received the 1987 **History of Geology Award** of the Geological Society of America; he was awarded the **Founder's Medal** for 1988 by the Society for the History of Natural History; and he was the first recipient (also in 1988) of the **Sue Tyler Friedman Medal** for the history of geology from the Geological Society of London. (See also USA Report). Dr. Rudwick is now Professor of the History of Science at the University of California, San Diego. His recent publications include:

Rudwick, Martin J. S., "International arenas of geological debate in the early nineteenth century." *Earth Science History*, vol. 5, 152-8, 1987.

-----, "A year in the life of Adam Sedgwick and company, geologists." *Archives of Natural History*, vol. 15, 243-268, 1988.



## Biography

A detailed biography of John Farey (1766-1826), Mineral Surveyor, was written by Trevor D. Ford and Hugh S. Torrens to be used as the introduction to a reprint edition of Farey's *General View of the Agriculture and Minerals of Derbyshire*, vol. 1 (1811). The reprint volume also will contain a complete bibliography, prepared by Torrens, of all 250 of Farey's writings. Farey was, in effect, a "Press Agent" for William Smith, and he published much of Smith's system of stratigraphy before Smith did. The title, which promises a local survey, obscures the fact that the book includes a lot of basic stratigraphy and the first analysis of the geometrical effects of faulting. Publication was scheduled for 1989.

The First International Mining Law Conference was held in Matlock, Derbyshire, in May 1988, on the occasion of the 700th anniversary of the Derbyshire Lead Miner's Barmoot Court. The conference was chaired by Trevor Ford, who edited the collected papers for publication as Bulletin Volume 10, No. 4, Peak District Mining Museum of Matlock, December, 1988.

Trevor D. Ford  
Hugh S. Torrens

## Additional Publications

Torrens, Hugh S., "Geological Collecting and a Geological Career: Daniel Jones (1836-1918)." *Geological Curator*, 4 (8), 493-501, 1987.

-----, "Saleswoman to a new Science: Mary Anning and the Fossil Fish *Squaloraja* from the Lias of Lyme Regis." *Proceedings of the Dorset Natural History and Archaeological Society*, 108, 135-148, 1987.

-----, "John Gilbert (1812-1845) the Australian Naturalist and Explorer: New Light on his Work in England." *Archives of Natural History*, 14, 211-219, 1987.

-----, "Hawking History, a Vital Future for Geology's Past." *Modern Geology*, 13, 83-93, 1988.

-----, "Edmund Thomas Higgins (1831-1887)." *Geological Curator*, 5, 30-34, 1988.

## UNITED STATES OF AMERICA 1987-1988

### U. S. National Committee on the History of Geology (USHIGEO)

USHIGEO is sponsored by the U. S. National Committee on Geology, under the auspices of the National Academy of Sciences. Its purposes are to provide a continuing back-up group for the U.S. representative on INHIGEO, to assist in maintaining contact with individuals and organizations in the U.S., to help in identifying historians and geologists working on any phase of the history of geology, and to coordinate national activities in this field of study. USHIGEO meets each autumn during the annual meeting of the Geological Society of America. Its major efforts in 1987-1988 were to prepare for the history of geology activities at the 28th International Geological Congress in Washington. Other activities under discussion involve the establishment of a directory of historians of geology in North America and the formation of a Center for the History of Geology.

Since 1986, Clifford M. Nelson has served as Chairman and Kenneth L. Taylor, as Secretary. New officers will be elected in 1990.



## History of Geology Division, Geological Society of America

In 1987, at its 99th annual meeting in Phoenix, Arizona, the Division presented its **History of Geology Award** to Martin J.S. Rudwick for his series of illuminating works on the origins and early development of geology as a science. Stephen Jay Gould delivered the citation in which he stated that Rudwick's book, *The Great Devonian Controversy* may be the greatest document ever written in the history of empirical geology.

The Division held a workshop on the writing of history of geology, with instructors Mott Greene, Clifford Nelson and Michele Aldrich. It also held a symposium entitled *History of Studies of Arid Lands: Ancient and Modern*, with discussions on the growth of knowledge about desert landforms and processes in the American southwest, central and southwestern Asia, the Sinai peninsula, and connections with the geomorphology of Venus and Mars.

Officers elected for 1987-1988 were Chairman, Léo F. LaPorte; 1st Vice-Chairman, Clifford M. Nelson; 2nd Vice-Chairman, Nancy Alexander; Secretary-Treasurer, Michele Aldrich.

In 1988, at the 100th annual meeting of the GSA, in Denver, the Division presented its **History of Geology Award** to Stephen Jay Gould. Cecil J. Schneer, citationist, lauded Gould for his fundamentally important research on many aspects of the history of geology and his lucid writings that make his ideas accessible to all.

The Division symposium was entitled *History of the Establishment of a Geologic Framework for Human Evolution*. Papers ranged over problems in paleoanthropology, archaeology, and stratigraphy with and without radioisotope dating. There also was a technical session: *From Ramessid Map to Milankovitch Chronology*.

Officers for 1988-1989 were Chairman, Clifford M. Nelson; 1st Vice-Chairman Robert H. Dott, Jr.; 2nd Vice-Chairman, Alan E. Leviton, Secretary-Treasurer Michele Aldrich.

## History of Earth Sciences Society (HESS)

HESS is an international society with the single major objective of publishing the journal *Earth Sciences History* with two issues each year. Volume 6, 1987, consisted of two special issues: No. 1. was devoted to James Hall (1811-1898) and his quarrelsome contemporary geologists, and No. 2 to the history of geology in Australia.

In 1988, Volume 7, No. 1 included a history of the geological sciences at Harvard University from 1788 to 1850, a history of geology and education in China to 1949, the misinterpretations of some early California geologists, (1865-1951) and articles on J.B. de Lamarck as an environmentalist, Albert Einstein and meandering rivers, the early influence of the University of Heidelberg, and the discovery of Precambrian Ediacarian fauna in South Australia. Volume 7, No. 2 features several papers from a symposium on reefs, and a range of other topics. Each issue includes book reviews, meeting announcements, and a calendar of events of interest to historians of geology. The Secretary of HESS is Kennard Bork, a corresponding member of INHIGEO.

Ursula B. Marvin  
Kenneth L. Taylor

## VENEZUELA 1987-1988

Two government-sponsored projects are under way that in a few years will make available important historical documents for the history of geological sciences of Venezuela:

a) MARAVEN S.A., a Venezuelan oil company that since nationalization of the oil industry has continued the operations in areas previously under concession by the Dutch Shell group, is now organizing its



major depository of field geology note-books, with classification and restoration of material which dates back to 1912 when the "big oil hunt" started in Venezuela. This material is invaluable for oil industry historians. It clearly shows the evolution of the geological concepts applied in different periods, and supplies brief histories of the men involved.

b) The Ministry of Energy and Mines is also starting to organize its historical archives.

On November 11, 1988, the Sociedad Venezolana de Historia de las Geociencias was founded, giving a formal framework to a working group that was acting without support. The foundation act was signed by Miguel Lugo, Henry Salas, Andre Singer and Franco Urbani. The *Boletín e Historia de las Geociencias de Venezuela* previously published by the Universidad Central de Venezuela will be continued with 4 issues a year by the new Society. In December, 1988, editorial work was completed on two issues of the 1988 volume. The Society is actively seeking to enlarge its membership and sources of financial help for its publications. The mailing address of the new society is: SVHGC, Apartado 47334, Caracas 1041A, Venezuela.

During 1987 and 1988 the following works of geohistorical interest were published:

a) The bibliography of the German Wilhelm Sievers, who visited Venezuela in the 19th century and made important geographic and geological contributions.

b) A biographic chronology and bibliography of Alfredo Jahn, a Venezuelan with German education who also made important geographic and geological contributions.

c) A bibliography of Guillermo Zuloaga, co-founder of the first School of Geology in Venezuela in 1938.

d) Three papers on the history of Venezuelan speleology in the 19th century.

In July 1988, a paper entitled *The history of the evolution of geological knowledge in Venezuela during the 19th century*, was delivered at the "First Brazilian colloquium on the history and theory of geological knowledge," in Campinas, Brasil.

For 1990, a chapter about the history of geology in Venezuela since its discovery to the 19th century, is planned for a special issue of *Wissenschaftlich Zeitschrift* of Rostock, for the celebration of the 500th anniversary of the discovery of America, under the directorship of Professor M. Guntau.

F. Urbani

#### YUGOSLAVIA 1987-1988

During these years, papers on geology and the history of geology in Yugoslavia were presented during anniversary celebrations of various national institutions.

1987 marked the 100th anniversary of the founding of the Serbian Academy of Sciences and Arts. In connection with this event, geological works by the renowned academicians J. Pančić, J. Žujović, S. Radovanović, S. Urošević, J. Cvijić, P. Pavlović, V. Petković, J. Tomić, and others, were summarized. In 1988, 15 papers were published on the contributions of Jovan Zujovic to the geosciences in Serbia. He played an important role in the founding of petrography in Serbia, in determinations of the age and division of Serbia's metamorphic rocks, in studies of Serbia's Precambrian, Paleozoic, Mesozoic, Tertiary, and Quaternary formations, and in work on geotectonics. He also helped to found the Serbian Museum of Natural Sciences in Belgrade.

1988 marked the 150th year of the University of Belgrade, at which geology has been taught as a separate subject since 1853. A voluminous collection of works on the history of Belgrade University was published, which included an article by A. Grubic on the conditions of teaching when the Chair for Mineralogy

and Geology was first established in 1880; a history and survey of geological publications at the University by P. Stevanović; and a paper by N. Pantić on the contributions of M. Milanković to palaeoclimatology.

At the celebration of the 100th anniversary of the Museum of Natural Sciences in Sarajevo, presentations were made on the history of geological studies at this well known museum and in Bosnia and Herzegovina. Recognition was given to the work of A. Boue and the travel records by Austrian geologists, including F. Hauer, F. Mojsisovics, E. Tietze, A. Bittner, and others, and particularly to the efforts of F. Katzer and recent researchers.

Two important institutions in Belgrade, the Secondary Geological and Hydrometeorological School "Milutin Milanković," and the Institute for Geological and Mining Investigations in Nuclear and other Mineral Ores, celebrated the 40th year since their founding with publications of relevant papers.

The Museum of Natural History in Belgrade held a special exposition from December, 1987, to June, 1988, on the beginnings of *Natural History in Serbia*, including geology. In the same Museum, an exposition opened in December, 1988, on the life, work, and publications of Petar Pavlović (1864-1939), a geologist and the first Director of this Museum.

The Slovenian geological society celebrated the 80th birthday of Professor Ciril Slebinger, geologist, with appropriate words in his journal, *Obavestila Slovenskega geol. društva*.

### Publications

Novak, D.: "The first several years: 40th anniversary of the Geological Institute of Slovenia." *Obavestila Slovenskega geolog. društva*, No. 16, 18-24, Ljubljana, 1987.

Serbian Academy of Sciences and Arts: "A historical review of the Academy and Learned Societies in Serbia." 1-195, Beograd, 1987.

Grubić, A.: "Foundation of the Chair for Mineralogy and Geology 1980." University of Beograd, 1838-1988, 453-473, Beograd, 1988.

Pantić, N.: "Contribution of Milutin Milankovic to climatic changes in the geological past." *Geol. Public. Univ. of Beograd*, 543-564, 1988.

Sarić, V.: "Forty years of scientific work of the Geoinstitute." *Radovi Geoinstituta*, vol. 22, 7-20, Beograd, 1988.

Andjelković, M.: "Jovan Žujović, the founder of geologic science and school in Serbia." *Annales Géologiques de la Peninsule Balkanique*, vol. LI, 1-12, Beograd, 1988.

### Memorial Notes

"Kosta Petković (1903-1987)." Memorial by M. Andjelković, *Annales Géologiques Peninsule Balkanique*, vol LII, VII-XIV, Beograd, 1988.

"Branko Stepanović, University Professor, (1911-1986)." J. Perić, *Compte rendus Société serbe de géologie*, 1985-1986, 7-9, Beograd, 1988.

"Radoslav Jovanović, Academician, (1906-1985)." Z. Stevanović, *Ibid*, 11-12, Beograd, 1988.

A. Grubić



## COMMEMORATIONS

### Claude C. Albritton, Jr. (1913-1988)

"There is a quality to Claude Albritton's mind and taste that is singularly congenial to those of us who combine the love of science with the love of history," declared Cecil J. Schneer in 1983 when the Geological Society of America presented its **History of Geology Award** to Claude C. Albritton, Jr. Throughout his long and highly productive career, Claude Albritton worked in a wide range of scientific disciplines, always maintaining a broad interdisciplinary approach and a humanizing sense of history.

A Texan by birth and preference, Claude Albritton received his BA degree in Geology and Geography in 1933 from Southern Methodist University in Dallas, and his PhD in 1936 from Harvard University with a thesis on the geology of the Malone Mountains of Texas. He then returned to Southern Methodist where he remained throughout his career, progressing from instructor to full professor in 1947, and on to an endowed professorship in 1955. Over the years he served in three deanships and as Vice-Provost. Claude helped to establish both the Albritton Professorship in Geology and the Institute for the Study of Earth and Man, which he served as Vice President. Generations of his students acclaim him as an exceptionally fine teacher. Outside the University, Claude is known worldwide for his landmark publications on geology and the history of geology.

Claude's scientific interests included structural geology, stratigraphy, paleontology, geomorphology, Quaternary geology, archaeological geology, ore deposition, and even meteoritics. As a young instructor in 1936 he collaborated with a student, John D. Boon, Jr., on a paper proposing that so-called cryptovolcanic structures are deeply eroded meteorite impact scars. Today that paper ranks among the classics. "Classic," laughed Claude in 1988, "it was only nine pages!" But those nine pages introduced a new concept, which, after decades of controversy, is now universally accepted among specialists on impact phenomena.

Claude departed from common practice in American universities by introducing the history of geology into the graduate level program at SMU. In 1963, in recognition of the 75th anniversary of the founding of the Geological Society of America, he arranged for a major symposium focusing on the history and philosophy of geology. The resulting book, *The Fabric of Geology*, to which Claude contributed as writer and editor, was the first of its genre in America. In a second major book, *The Philosophy of Geohistory: 1785-1970*, Claude presented selections from two centuries of geologic classics. In addition to large numbers of articles, Claude published two more books: *The Abyss of Time* (1986) and *Catastrophic Episodes in Earth History*, which appeared in 1989 shortly after his death on November 1, 1988. *The Abyss of Time* reflected Claude's enduring interest in the concept of geologic time, which he believed would come to be acclaimed as one of the more wonderful contributions from natural science to general thought. The book also mirrored his concern about the rise of creationism in America, and he called it "a teacher's answer to the obscurantism that seeks to annul all Western thought since the Enlightenment."

In his final book Claude returned to meteorite impact and examined its role in planetary evolution and mass extinctions. He placed this phenomenon in context with legendary disasters of ancient times and 18th and 19th century catastrophism. One could not find a more elegantly written and authoritative overview of this controversial subject.

Claude Albritton was an early corresponding member of INHIGEO, and one of the founders of USHIGEO, which he later chaired. He also was a founder and a chairman of both the History of Geology Division and the Division of Geological Archaeology of the Geological Society of America. His resume shows service in policy-making positions on more than 20 other societies, boards, and committees. Claude conducted his public life of teaching, research, publishing, and committee service with unfailing good humor and generosity of spirit. Of far more importance to him than all of this, however, was his family life, overflowing with shared love and happiness.

Ursula B. Marvin



#### **Stanislaus Ribera-Falg O.S.B. (1920-1989)**

Born in Barcelona, Spain, S. Ribera-Falg earned a degree in geology at Barcelona University in 1943. Ten years later he obtained a fellowship to Harvard University to work for a PhD degree with Professor Kirk Bryan. In 1953 he moved to the United States of America where he settled permanently. Instead of finishing his scientific research at Harvard, he became a Brother of the Benedictine Order. In 1986 he obtained his doctoral degree at Barcelona University with a thesis entitled: *Anglo-Saxon Contributions to the Geology of Spain*. He published several papers on this subject, and, in 1988, the entire study was published as a book: *Historia del Interés Anglosajón por la Geología de España*, Consejo Superior de Investigaciones Científicas, Madrid, 522 pages. He intended to present a summary at the INHIGEO Symposium on *Trans-Atlantic Exchange of Geological Ideas* at the 28th International Geological Congress in Washington, D.C. Unfortunately, he died on June 25, 1989, at Petersham, Massachusetts, two weeks before the opening of the Congress.

Carmina Virgili

#### **Professor Stefan Zbigniew Różycki (1906-1988)**

S. Z. Różycki was Professor of Quaternary Geology at Warsaw University from 1952 to 1976 and a full member of the Polish Academy of Sciences. Another of his specialties was Jurassic stratigraphy. He developed new approaches to the study of Pleistocene climatic stratigraphy, and recently became engaged in the problem of origin of loess.

Professor Różycki carried out geological investigations not only in Poland but in several other widely separated areas of the world. He was the first Polish geologist to perform geological field studies in Spitsbergen (1934), and after World War II he participated in expeditions to Antarctica (1959), North America (1965), Africa (1970), and Asia (Vietnam and China 1956, India 1967).

Professor Różycki authored several publications on the history and accomplishments of Polish polar expeditions, and on geological studies carried out in various scientific institutions in Warsaw, particularly at Warsaw University. He left an unpublished manuscript entitled, *200 years of geological sciences in Warsaw*. For many years he cooperated with the Institute of Geological Sciences of the Polish Academy of Sciences, and served as the editor of its journal *Studia Geologica Polonica*. Professor Różycki inspired many of his pupils to undertake research in the history of the geological sciences.

W. Narębski Z. Wójcik

#### **Professor Edward Wilhelm Rühle (1905-1988)**

E. W. Rühle was born in Warsaw where he finished secondary school and studied geography and geology at the University from 1926 to 1931. As a student he carried out the first field work to be performed in the eastern part of Poland (called Polesie), and in 1929 he won a prize for his geologic maps of that area. In the years 1938 to 1972 Rühle was employed as a specialist in Tertiary and Quaternary geology and geological mapping in the State Geological Institute in Warsaw. In 1946 he was nominated to be Vice Director of this institution and for 12 years (1954-1966) he served as the Director. From 1974 to 1988 he was the editor-in-chief of the monthly *Przegląd Geologiczny* (Geological Review).

Professor Rühle was an outstanding authority in the field of Quaternary geology and geological mapping, being the author of about 400 papers and maps. Approximately 50 of his papers are devoted to problems relating to the history of the geological sciences in Poland and abroad. They trace developments at state geological surveys and recount the history of military cartography. Of special interest is his 1980 paper on Polish clandestine cartographic publications during the Nazi occupation, and an unpublished manuscript on the



history of exploration for mineral deposits in Poland.

E. W. Rühle delivered numerous historical lectures at scientific conferences in Poland and elsewhere. During a Soviet-Polish symposium in Leningrad he described K. Bohdanowicz as a pioneer in the use of paleogeographic and facies methods in geological studies.

Paying homage to the many-sided merits of Professor Rühle, we have to emphasize not only his scientific achievements but also his deeply human personality.

Wojciech Narębski Zbigniew Wójcik

## BOOK REVIEWS

**François Ellenberger:** *Histoire de la Géologie*, Tome 1, *Des Anciens à la première moitié du XVII<sup>e</sup> siècle*. 312 pp. Petite Collection d'Histoire des Sciences, éd. Technique et Documentation. Lavoisier, Paris, 1988. ISBN 2-85206-457.

Professor F. Ellenberger, Full member of the International Commission of the History of Geological Sciences (INHIGEO) for France, Chairman of the Comité Français de l'Histoire de la Géologie (COFRHIGEO), has added an extraordinarily brilliant gem to the jewelry of work in the history of geology. Dealing with the "prehistory" of geology, in its "embryonic" stage, until the birth of geology proper, marked by the *Prodromus* of N. Stenon, he chose a fresh approach, carefully avoiding deeply rooted prejudices and widely accepted erroneous judgements. By returning to the original sources and providing us with profuse and pertinent quotations, he invited the ancient authors to speak for themselves. A masterpiece of erudition and balanced wisdom, this work sheds new light on the relevant ideas of Antiquity, the Middle Ages, the Renaissance, and the early XVIIIth century.

For a geologist of the XXth century, it is not easy to rid oneself--for the time of the reading--of all our Cartesian, Lyellian, and other theoretical ballast in order to accomplish a sort of empathy; to enter into the very minds of our early predecessors, and float in their particular historical, social and scientific environment, so considerably different from ours. However strenuous it may be, it is well worth trying to follow the distinguished author in this intellectual adventure. It is an exceptional pleasure, indeed, to encounter all those trials and errors, to discover pitfalls of impeccable logic leading to the wrong conclusions, and scientifically unjustifiable (intuitive?) jumps of mind resulting in pioneering discoveries; in many cases forgotten or misinterpreted later.

I was strongly tempted to quote some fascinating examples but I have renounced doing so. Instead, I invite you to dive into this challenging work and detect its (no longer hidden) treasures for yourself. Take your time and make your way through it. Or, at least, make use of the indices of authors and themes according to your personal preferences and priorities. I am convinced you will find it highly rewarding.

We can only hope that we shall very soon have the privilege of reading the second volume of Professor Ellenberger's work, which certainly will match the high expectations aroused by this first one.

Endre Dudich



**Hollis D. Hedberg:** *The 1740 description by Daniel Tilas of stratigraphy and petroleum occurrence at Osmundsberg in the Siljan region region of central Sweden.* American Association of Petroleum Geologists, 96 p. Tulsa, Oklahoma, 1988.

This is a book of paramount interest. It shows that the historical significance of Tilas' paper lies in the fact that it is one of the earliest known bed-by-bed geological descriptions of the occurrences of petroleum through a substantial sequence of strata in a specific geologic section. Further, it is one of the earliest published examples of lithostratigraphic correlation of beds between two neighbouring and largely subsurface sequences of rock strata on the basis of a marker bed common to both of them. A photocopy of the original Old-Swedish printing of Tilas' article, followed by an annotated English translation, is found in the book.

G. Regnéll

**William A. S. Sarjeant:** *Geologists and the History of Geology: An International Bibliography from the Origins to 1978*, vol. 1-5, 4526 pages; *Supplement, 1979-1984 and Additions*; vol. 6-7. Krieger Publishing Co., Melbourne, Florida, U.S.A., 1987.

Access to this massive compilation of references is absolutely essential for all historians of geology and related sciences. The new supplement has expanded the series from 5 to 7 volumes, with listings from the earliest times through 1984. The author performed extensive computer searches in an effort to reference all major and minor works dealing with the history of geology written in the Latin alphabet. The contents include a general introduction listing the serial publications searched and sections on general works (general histories of science, histories of geology, and of allied subjects); historical accounts of societies, museums, and other institutions concerned with geology; histories of the petroleum industry (including histories of companies and corporations, autobiographical and biographical works, and works on the folklore of the industry); significant events in the history of geology; the lives and works of individual geologists; accounts of prospectors, diviners and mining engineers; an index of geologists by nationality and country (indexed by country born and by countries worked in); an index of geologists by specialty, and indexes of authors, editors, and translators; and a section on computerized bibliography production with cross reference indices.

The supplement (Volumes 6 and 7) lists publications that appeared between 1979 and 1984. It also lists a large number of new items for earlier years, resulting from computer searches of 168 journal series not previously surveyed. In addition, the supplement includes a very useful appendix listing women geologists. This work is a reference library in itself.

Ursula B. Marvin

**Prace Muzeum Ziemi** - Proceedings of the Museum of the Earth, No. 39. Proceedings on the History of Geological Sciences, Edited by J. Garbowska and K. Jakubowski. 109 p., Warsaw, 1988.

This volume contains two papers: *Theories of the Deluge in European natural history of the second half of the 17th century: their origin and significance in the history of geological ideas*, by J. Popielek, and *Archival materials concerning the scientific activity of Polish geologists in the collections of the Museum of the Earth*, by J. Garbowska and B. Studencka (both with English summaries).

The first paper presents the ideas of late 17th century European philosophers on the genesis of the Deluge. This is basically a compilation, and does not utilize all of the published source materials and recent literature on this subject. Nevertheless, Popielek's monograph provides an interesting look at the initial period of the neptunistic concept in England, Italy, and Germany. In addition, the problem of the relation of science to religion is discussed in some detail.

The second paper describes the archival materials of several eminent Polish geologists who worked in many different countries and continents: R. Danysz-Fleszarowa, S. Karczewski, J. Lewiński, J. Morowewicz, A.



Panow, K. Skoczylas-Ciszewska, S. J. Thugutt, K. Tolwinski, and T. Wiśniowski. Also included are archival manuscripts on research studies in South America by R. Kozłowski and J. Siemiradzki.

Z. Wójcik

**Protokoły Posiedzeń Komisji Kruszcowej 1782-1787** - Reports of the Ore Committee of Stanisław August Poniatowski. Elaborated by Z. J. Wójcik, edited by W. Różański, 77 p. (English summary), Kraków-Kielce, 1987.

This Ore Committee (1782-1795) was the first Polish ministry of geology, mining and metallurgy, consisting of commissioners nominated by the last king, Stanisław August Poniatowski, and lead by Bishop K. Szembek. Most of the published reports were preserved in the Library of the Cracovian Branch of the Polish Academy of Sciences, with a few probably coming from a collection of documents of commissioner T. Czacki, who was also a geologist.

The activity of this Committee was concentrated mainly on the urgent problem of prospecting for rock salt, but exploitation of other ores was also important. After the first partition of Poland in 1772, the main salt mines at Wiejliczka and Bochnia remained abroad, and this resulted in a deficit of this raw material. The Committee entrusted J. Ph. Carosi, an Italian educated in Lipsia, to direct prospecting for deposits within Poland, but no adequate sources were found. Exploitation of copper ores in Miedziana Góra, near Kielce, was carried on to produce coins, bells and arms. No major mining was started, however, of the silver-bearing lead ores in the Olkusz region because the drainage of water in the mines was too expensive. Better results were obtained in stimulating private exploitation of coal and iron ores in feudal Poland, which propagated the ideas of a capitalistic economy.

The Ore Committee, though working under very difficult political conditions, contributed considerably to the development of applied geology in Poland.

W. Narębski

**Wkład Wileńskiego ośrodka naukowego w przyrodnicze poznanie kraju (1781-1842)** - The contribution of Vilna scientific center to the natural exploration of home country. Edited by J. Babicz and W. Gębecka, (English summaries), 300 p., Wrocław, 1988.

Vilna (now Vilnius) was the capital of the Grand Duchy of Lithuania until 1795 and, after the partition of the Polish-Lithuanian state, it was incorporated into the Russian empire. The Polish university at Vilna, existing until 1831, supervised intermediate schools of the western provinces of this empire. Lectures on geology and mineralogy were presented there as branches of natural history. Many courses involved geological exploration. In cooperation with teachers of the famous Gymnasium of Krzemieniec, students penetrated fairly large areas between the Baltic and Black seas. Particular attention was paid to Volhynia and Podolia because of good outcrops of crystalline and sedimentary rock series with numerous mineral deposits. In this volume, J. Garbowska discusses this work in a paper entitled, *Geological studies carried out in the Vilna scientific center from 1787 to 1832*. It refers to the repercussions of modern geological ideas of western (mainly French and German) scientists. The paper is based on rich archival materials studied in Vilna and Cracow.

The volume also contains papers on the geography and exploration of the natural environment in Vilna and Krzemieniec by J. Babicz; studies on vegetation in the Vilna and Krzemieniec centers by W. Grebecka; and zoology in the Vilna scientific center by K. Plasota. These authors show that at the beginning of the 19th century, the University of Vilna was a leading scientific center within the Polish territory when compared with the universities at Warsaw and Cracow. All of these schools maintained a higher scientific and educational level than the other universities in the Russian empire, such those at Moscow, Dorpat, Kazan and Petersburg. Consequently, the liquidation of Vilna University as a reprisal after the insurrection of 1830-1831 was a heavy blow against Polish and European science.

W. Narębski Z. Wójcik





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